



## CONTRACTOR INFORMATION

Contractor:	EF Johnson Company		
Contact:	Chris Sherry	Alternate Contact:	Tim Gwin
Phone:	800-328-3911 x6256		800-328-3911 x6340
Fax:	507-835-6283		507-835-6485
Email:	<a href="mailto:csherry@efjohnsn.com">csherry@efjohnsn.com</a>		<a href="mailto:Tgwin@efjohnson.com">Tgwin@efjohnson.com</a>
Internet address:	<a href="http://www.efjohnson.com">www.efjohnson.com</a>		
Web catalog address:			
Federal ID No.:	41-0436849		
Supplier No.:	7812		
Total Contract worth:	\$500,000,000.00		
Payment address:	E.F. Johnson 299 Johnson Avenue P.O. Box 1249 Waseca, MN 5603-0514	Order placement address:	E.F. Johnson 299 Johnson Avenue P.O. Box 1249 Waseca, MN 5603-0514
Customer Service:	Tim Gwin		
Telephone:	800-328-3911 x6340		
Fax:	507-835-6485		
Ordering procedures:			
Credit card acceptance:	None		
Minimum orders:			
Currently Installed Systems, upgrade equipment, radio equipment and accessories	20% off Manufacturer List Price		
Support Services	\$125 per hour		
Installation Services	\$125 per hour		
Repair Services	\$125 per hour		
Delivery time:	Negotiated days After Receipt of Order (ARO)		
Payment terms:	0% 30 days		
Shipping destination:	Freight on Board (FOB) destination		
Freight :	Prepaid and included		
Palletization :	N/A		
Category	Category 1		
Equipment Line items			
Link to bid Specifications			
Awarded Phase(s)	Phase I & II		

## EF Johnson Company – Phase II

## EF JOHNSON Price Sheet

ITEM	Mfg Name	Brand/Model#	Total Price
<b>Portable Analog</b>			
High VHF 136-174 Quality Category A	EF Johnson	5112-610-10	\$1,495.00
High VHF 136-174 Quality Category B	EF Johnson	5112-610-10	\$1,495.00
UHF 450-470 Quality Category A	EF Johnson	5132-410-10	\$1,484.60
UHF 450-470 Quality Category B	EF Johnson	5132-410-10	\$1,484.60
UHF 450-470 Category D	EF Johnson	5132-410-10	\$1,484.60
UHF 806-870 Quality Category A	EF Johnson	5182-810-10	\$1,484.60
UHF 806-870 Quality Category B	EF Johnson	5182-810-10	\$1,484.60
UHF 806-870 Quality Category C	EF Johnson	7780-302	\$718.25
UHF 806-870 Quality Category D	EF Johnson	7780-302	\$718.25
<b>Desktop Analog</b>			
UHF 806-870 Quality Category C	EF Johnson	9883-303	\$1,326.65
UHF 806-870 Quality Category D	EF Johnson	9883-302	\$1,196.65
<b>Mobile Analog</b>			
High VHF 136-174 Quality Category B	EF Johnson	5317-11-10	\$1,764.75
High VHF 136-174 Category C	EF Johnson	5317-11-10	\$1,764.75
High VHF 136-174 Category D	EF Johnson	5317-11-10	\$1,764.75
UHF 806-870 Quality Category C	EF Johnson	9883-303	\$848.25
UHF 806-870 Quality Category D	EF Johnson	9883-302	\$718.25
<b>Portable Digital</b>			
High VHF 136-174 Quality Category A	EF Johnson	5112-610-20	\$1,762.80
High VHF 136-174 Quality Category B	EF Johnson	5112-610-20	\$1,762.80
High VHF 136-174 Quality Category C	EF Johnson	5112-610-20	\$1,762.80
High VHF 136-174 Category D	EF Johnson	5112-610-20	\$1,762.80
UHF 450-470 Quality Category A	EF Johnson	5132-410-20	\$1,754.40
UHF 450-470 Quality Category B	EF Johnson	5132-410-20	\$1,754.40
UHF 450-470 Quality Category C	EF Johnson	5132-410-20	\$1,754.40
UHF 450-470 Quality Category D	EF Johnson	5132-410-20	\$1,754.40
UHF 806-870 Quality Category A	EF Johnson	5182-810-20	\$1,754.40
UHF 806-870 Quality Category B	EF Johnson	5182-810-20	\$1,754.40
UHF 806-870 Quality Category C	EF Johnson	5182-810-20	\$1,754.40
UHF 806-870 Category D	EF Johnson	5182-810-20	\$1,754.40
<b>Desktop Digital</b>			
High VHF 136-174 Quality Category D	EF Johnson	5317-11-20	\$2,190.50
UHF 806-870 Quality Category C	EF Johnson	5337-11-20	\$2,190.50
UHF 806-870 Quality Category D	EF Johnson	5337-11-20	\$2,190.50
<b>Mobile Digital</b>			
High VHF 136-174 Quality Category C	EF Johnson	5137-11-20	\$1,901.25
High VHF 136-174 Quality Category D	EF Johnson	5137-11-20	\$1,901.25
UHF 806-870 Quality Category C	EF Johnson	5387-11-20	\$1,901.25
UHF 806-870 Quality Category D	EF Johnson	5387-11-20	\$1,901.25

**EF Johnson Company – Phase II**

<b>ITEM</b>	<b>Mfg Name</b>	<b>Brand/Model#</b>	<b>Total Price</b>
<b>Mobile Trunked Digital</b>			
High VHF 136-174 Quality Category C	EF Johnson	5317-11-21	\$2,158.65
High VHF 136-174 Quality Category D	EF Johnson	5317-11-21	\$2,158.65
UHF 806-870 Quality Category C	EF Johnson	5387-11-21	\$2,158.65
UHF 806-870 Quality Category D	EF Johnson	5387-11-21	\$2,158.65
<b>Portable Trunked Digital</b>			
High VHF 136-174 Quality Category B	EF Johnson	5112-610-21	\$1,732.90
High VHF 136-174 Quality Category C	EF Johnson	5112-610-21	\$1,732.90
High VHF 136-174 Quality Category D	ED Johnson	5112-610-21	\$1,732.90
UHF 450-470 Quality Category A	EF Johnson	5100 Series	\$1,722.50
UHF 450-470 Quality Category B	EF Johnson	5100 Series	\$1,722.50
UHF 450-470 Quality Category C	EF Johnson	5100 Series	\$1,722.50
UHF 450-470 Quality Category D	EF Johnson	5100 Series	\$1,722.50
UHF 806-870 Quality Category B	EF Johnson	5132-410-21	\$1,722.50
UHF 806-870 Quality Category C	EF Johnson	5132-410-21	\$1,722.50
UHF 806-870 Quality Category D	EF Johnson	5132-410-21	\$1,722.50

Discount percentage represented by bid prices is		35% off of List
Delivery - expressed in days after Receipt of Order		Varies by Order
Warranty Period - in excess of that required by the specifications (in days)		0
% Tax required		Varies by State
Components added to the above models to meet required specifications:		None

## EF Johnson Company – Phase II

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-66	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	3	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-65	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-78
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ		
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		6/16/2003

Part Number	Description	Price
	Flashing, EEPROM	Available
	Provision for Field Software Unmade	Available
2	Secure Encryption Option	\$375.70
250-5 100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5 100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Analog

## High VHF 136-174 Quality Category B

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-65	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	3	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-65	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-78
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,495.00</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

REQUIRED OPTIONS		
Part Number	Description	Price
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
2	Secure Encryption Option	\$375.70
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
OPTIONAL OPTIONS		
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Analog

## UHF 450-470 Quality Category A

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25	12.5 / 25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-65	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	3	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-73/-63	-75
Spurious and Image Rejection, dB	-73	-75
Intermodulation, dB	-73	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,484.60</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

## REQUIRED OPTIONS

Part Number	Description	Price
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
2	Secure Encryption Option	\$375.70
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Analog**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	40	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5/12.5	12.5/ 25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-65	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	3	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-73/-63	-75
Spurious and Image Rejection, dB	-73	-75
Intermodulation, dB	-73	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,484.60</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
2	Secure Encryption Option	\$375.70
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
51S3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Analog

## UHF 450-470 Quality Category D

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	2.0
Channel Spacing, kHz	12.5 / 25	12.5/25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+3, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-77
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,484.60</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		6/16/2003

**EF Johnson Company – Phase II**

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
included	Position Rotary Channel/Mode Select Switch Option	n/c
included	Low Battery Alert Tone Option	n/c
Included	Alphanumeric Display Option	n/c
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	n/c
585-5100-120	Leather Carrying Case Option	\$160.55
589-0015-057	External Speaker/Microphone Option	\$45.50
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
-2	Secure Encryption Option	\$375.70
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
included	Emergency Button/Switch Option	
included	Programmable Button/Switch Option	
included	Push-to-talk ID Transmission Option	
<b>See Attached</b>	<b>See Price Pages attached form complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Analog**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 "C to + 60 "C), PPM	± 1.5	± 1.5
Channel Spacing, kHz	12.5120125	12.5125
<b>TRANSMITTER</b>		
RF Power Output, Watts	113 selectable (Low/High)	113 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-48	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	3	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad. dBm	-119	-119
Selectivity, adj. channel (dB), 25112.5 kHz	-721-63	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-72	-74
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ		
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,484.60</b>
<b>OTHER INFORMATION:</b>		
<b>Prices are based on Manufacturer's price list entitled:</b>		5100 Series
<b>Prices are based on price list quoted above dated:</b>		611612003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
	Flashing EEPROM	Available
	Provision for Field Software Unmade	Available
2	Secure Encrvption Option	\$375.70
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC. 60 HZ *	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Analog

## UHF 806-870 Quality Category B

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	± 1.5	± 1.5
Channel Spacing, kHz	12.5/20/25	12.5/25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-48	-75
FM Noise, dB	-40	-45
Audio Distortion, % maximum	3	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-72/-63	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-72	-74
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	3	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ		
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,484.60</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
Part Number	Description	Price
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
2	Secure Encryption Option	\$375.70
250-05100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****UHF 806-870 Quality Category C**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 "C to + 60 "C), PPM	± 2.5	± 1.5
Channel Spacing, kHz	12.5120125	25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	<b>-40</b>
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-63	-68
Spurious and Image Rejection, dB	-70	-68
Intermodulation, dB	-70	-68
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ		
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$718.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		7700 Series
Prices are based on price list auoted above dated:		1/4/2002

**EF Johnson Company – Phase II**

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
585-5020-020/021	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$79.30
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Alphanumeric Display Option	
n/c	Dual Tone Multi Frequency encoder and Key Pad Option	
585-5000-052	Leather Carrying Case Option	\$52.00
589-0015-047	External Speaker/Microphone Option	\$81.25
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
n/a	Secure Encryption Option	n/a
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
included	Emergency Button/Switch Option	
included	Programmable Button/Switch Option	
included	Push-to-talk ID Transmission Option	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Analog****UHF 806-870 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 "C to + 60 "C), PPM	± 2.5	± 1.5
Channel Spacing, kHz	12.5120125	25
<b>TRANSMITTER</b>		
RF Power Output, Watts	113 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	-40
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25112.5 kHz	-70/-63	-68
Spurious and Image Rejection, dB	-70	-68
Intermodulation, dB	-70	-68
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-	
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$718.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		7700 Series
Prices are based on price list quoted above dated:		1/4/2002

**EF Johnson Company – Phase II**

<b>REOUURED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
585-5020-020/021	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ *	\$73.30
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
Included	Alphanumeric Display Option	
n/c	Dual Tone Multi Frequency encoder and Key Pad Option	
585-5000-052	Leather Carrying Case Option	
589-0015-047	External Speaker/Microphone Option	\$52.00
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
	Flashing EEPROM	Available
	Provision for Field Software Upgrade	Available
n/a	Secure Encryption Option	n/a
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
included	Emergency Button/Switch Option	
included	Programmable Button/Switch Option	
included	Push-to-talk ID Transmission Option	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Desktop Analog**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	35	30
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-35	-45/-38
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-70/-60
Spurious and Image Rejection, dB	-70	-70
Intermodulation, dB	-68	-70
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-	
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,326.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		9800 Series
Prices are based on price list quoted above dated:		1/4/2002

<b>OPTIONAL OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
n/a	Secure Encryption Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Desktop Analog

## UHF 806-870 Quality Category D

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	15	30
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-35	-45/-38
Audio Distortion, % maximum	5	3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-70/-60
Spurious and Image Rejection, dB	-70	-70
Intermodulation, dB	-68	-70
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,196.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		9800 Series
Prices are based on price list quoted above dated:		1/4/2002

Part Number	Description	Price
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
n/a	Secure Encryption Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Analog****High VHF 136-174 Quality Category B**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	2.5
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	50	50
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	3	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-65	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-75
Speaker Audio Output, watts	5	12
Audio Distortion, % maximum	3	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm		
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,764.75</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
-2	Secure Encryption Option	\$617.50
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
<b>OPTIONAL OPTIONS</b>		
n/a	Second Programmable Receiver with Separate Speaker	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company - Phase II

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to +60 °C), PPM	2.5	2.5
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
RF Input/output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	40	50
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,764.75</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
Part Number	Description	Price
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Alphanumeric Display Option	-
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	-
n/a	Second Programmable Receiver with Separate Speaker	n/a
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
-2	Secure Encryption Option	\$617.50
included	Emergency Button/Switch Option	-
included	Programmable Button/Switch Option	-
included	Push-to-talk ID Transmission Option	-
See Attached	See Price Pages attached for complete Accessories and Options	

## EF Johnson Company – Phase II

## Mobile Analog

## High VHF 136-174 Quality Category D

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	2.5
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	25	50
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+3, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm		
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,764.75</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		611612003

<b>REQUIRED OPTIONS</b>		
Part Number	Description	Price
-13	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	-
n/a	Second Programmable Receiver with Separate Speaker	n/a
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
-2	Secure Encryption Option	\$617.50
included	Emergency Button/Switch Option	-
included	Programmable Button/Switch Option	-
included	Push-to-talk ID Transmission Option	-
included	Alphanumeric Display Option	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company - Phase II****Mobile Analog****UHF 806-870 Quality Category C**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	35	30
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-35	-45/-38
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-70/-60
Spurious and Image Rejection, dB	-70	-70
Intermodulation, dB	-68	-70
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity (@ 5% referenced @ 12.5 KHZ. dBm	-	
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		9800 Series
Prices are based on price list quoted above dated:		1/4/2002

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
239-0226-113	Desktop/Mobile Conversion Option	\$357.50
included	Alphanumeric Display Option	
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
	Flashing EEPROM	
	Provision for Field Software Upgrade	available
n/a	Secure Encryption Option	n/a
included	<b>Emergency Button/Switch Option</b>	
included	<b>Programmable Button/Switch Option</b>	
included	<b>Push-to-talk ID Transmission Option</b>	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Analog****UHF 806-870 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	15	30
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-35	-45/-38
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-70/-60
Spurious and Image Rejection, dB	-70	-70
Intermodulation, dB	-68	-70
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-	-
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$718.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		9800 Series
Prices are based on price list quoted above dated:		1/4/2002

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
239-0026-113	Desktop/Mobile Conversion Option	\$357.50
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
	Flashing EEPROM	available
	Provision for Field Software Upgrade	available
n/a	Secure Encryption Option	n/a
included	<b>Emergency Button/Switch Option</b>	
included	<b>Programmable Button/Switch Option</b>	
included	<b>Push-to-talk ID Transmission Option</b>	
included	<b>Alphanumeric Display Option</b>	
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

**Portable Digital  
High VHF 136-174 Quality Category A**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-67	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-78
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,762.80</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
<b>589-0015-058</b>	<b>External Speaker/Microphone Option</b>	<b>\$84.50</b>
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II****Portable Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30°C to +60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 125 130	12.5/ 25 130
<b>TRANSMITTER</b>		
RF Power Output, Watts	115 selectable (Low/High)	115 selectable (Low/High)
Radiated Spurious & Harmonic Emission. dB	-70	-70
FM Noise. dB	-45	-45
Audio Distortion. % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-67	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-78
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,762.80</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		611612003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicle Charger/Console Option	n/a

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to +60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-43	-45
Audio Distortion, % maximum	3	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-78
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,762.80</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

## EF Johnson Company – Phase II

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 "C to + 60 "C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 125 130	12.5 125 130
<b>TRANSMITTER</b>		
RF Power Output, Watts	115 selectable (Low/High)	115 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-57	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-60	-78
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,762.80</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list auoted above dated:		6/16/2003

included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Ontion	
included	Alphanumeric Display Option	-
included	Adaptive Transmitter Power Control Option	-
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	2	± 2.0
Channel Spacing, kHz	12.5120125	12.5125
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-68	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
5890015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	40	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	2	± 2.0
Channel Spacing, kHz	12.5/20/25	12.5/ 25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-68	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
Part Number	Description	Price
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ*	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	5	± 2.0
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	114 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-43	-45
Audio Distortion, % maximum	5	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-77
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

REQUIRED OPTIONS		
Part Number	Description	Price
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-0058	External Speaker/Microphone Option	\$84.50
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	5	± 2.0
Channel Spacing, kHz	12.5/20/25	12.5 / 25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-77
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-116	-119
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II****Portable Digital****UHF 806-870 Quality Category A**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	1.5	± 1.5
Channel Spacing, kHz	12.5/25	12.5/25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-63	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-74	-74
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		6/1612003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Digital

## UHF 806-870 Quality Category B

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	1.5	± 1.5
Channel Spacing, kHz	12.5/25	12.5/25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	2	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-63	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-74	-74
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

Part Number	Description	Price
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ*	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	± 1.5
Channel Spacing, kHz	12.5/25	12.5/25
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity. EIA 12dB Sinad. dBm	-116	-119
Selectivity. adi. channel (dB). 25112.5 kHz	-701-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-74
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.40</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

Part Number	Description	Price
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II****Portable Digital****UHF 806-870 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	± 1.5
Channel Spacing, kHz	12.5125	12.5125
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-60/-55	-75
Spurious and Image Rejection, dB	-65	-75
Intermodulation, dB	-65	-74
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,754.90</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	-
included	Position Rotary Channel/Mode Select Switch Option	-
included	Low Battery Alert Tone Option	-
included	Programmable Button Option	-
included	Push-to-talk ID Transmission Option	-
included	Alphanumeric Display Option	-
included	Adaptive Transmitter Power Control Option	-
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	
589-0015-058	External Speaker/Microphone Option	
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

## EF Johnson Company – Phase II

## Desktop Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	5	2.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25 / 30
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	25	100
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-65	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,190.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		611612003

OPTIONAL OPTIONS		
Part Number	Description	Price
See Attached	See Price Pages attached for complete Accessories and Options	

**EF Johnson Company – Phase II****Desktop Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to +60 °C), PPM	25	1.5
Channel Spacing, kHz	12.5 125	12.5 125
RF Input/Output Impedance, Ohms	<b>50</b>	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	35	35
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	<del>1-B</del>	<del>1-B</del>
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-68	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,190.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		611612003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Desktop Digital

## UHF 806-870 Quality Category D

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	15	35
Radiated Spurious & Harmonic Emission, dB	-55	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-65/-60	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-65	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-115	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,190.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/16/2003

Part Number	Description	Price
See Attached	See Price Pages attached for complete Accessories and Options	

**EF Johnson Company – Phase II**

**Mobile Digital**

**High VHF 136-174 Quality Category C**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	5	2.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25 / 30
RF Input/Output Impedance. Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	40	50
Radiated Spurious & Harmonic Emission. dB	-70	-70
FM Noise. dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,901.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		611612003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
585-400 1-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	

**OPTIONAL OPTIONS**

included	Sinnle Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Digital****High VHF 136-174 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	5	2.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25 / 30
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	25	50
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	<del>1-12</del>	<del>1-12</del>
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,901.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/16/2003

**REQUIRED OPTIONS**

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	35	35
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-68	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-115	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,901.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		<b>5300 Series</b>
Prices are based on mice list auoted above dated:		<b>6/16/2003</b>

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	<b>\$139.75</b>
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 125	12.5 125
RF Input/Output Impedance, Ohms	50	50
<b>TRANSMITTER</b>		
RF Power Output, Watts	15	35
Radiated Spurious & Harmonic Emission, dB	-55	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-68	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-115	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,901.25</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Paes attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Mobile Trunked Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	5	2.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25 / 30
RF Input/Output Impedance, Ohms	50	50
APCO P-25 TRUNKED STANDARDS		
<b>TRANSMITTER</b>		
RF Power Output, Watts	40	50
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,158.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6/1612003

REQUIRED OPTIONS		
Part Number	Description	Price
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
OPTIONAL OPTIONS		
Part Number	Description	Price
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	5	2.5
Number of Channels/Modes/Personalities	12.5 125	12.5 125 130
RF Input/Output Impedance, Ohms	50	50
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	25	50
Radiated Spurious & Harmonic Emission, dB	-55	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,158.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series
Prices are based on price list quoted above dated:		6116/2003

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Separate Data Connector Option	n/a
585-400 1-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Mobile Trunked Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	32	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5/12.5	12.5/ 25
RF Input/Output Impedance, Ohms	50	50
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	35	35
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-68	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-115	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,158.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		<b>5300 Series</b>
Prices are based on price list quoted above dated:		<b>6/16/2003</b>

## REQUIRED OPTIONS

Part Number	Description	Price
n/a	Separate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Prom-ammable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
<b>OPTIONAL OPTIONS</b>		
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Mobile Trunked Digital  
UHF 806-870 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	16	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	1.5
Channel Spacing, kHz	12.5 / 25	12.5 / 25
RF Input/Output Impedance, Ohms	50	50
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	15	35
Radiated Spurious & Harmonic Emission, dB	-55	-60
FM Noise, dB	-35	-45
Audio Distortion, % maximum	5	3
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-115	-116
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-73
Intermodulation, dB	-68	-75
Speaker Audio Output, watts	3	12
Audio Distortion, % maximum	5	3
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-115	-116
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$2,158.65</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5300 Series

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Sewparate Data Connector Option	n/a
585-4001-202	Desktop/Mobile Conversion Option	\$139.75
included	Emergency Button Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric display Option	
included	Single Unit Dash Mount Option	
n/a	Second Programmable Receiver with Separate Speaker	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Trunked Digital****High VHF 136-174 Quality Category B**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	115 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TWEIA 603)	+1. -3	+1. -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 2512.5 kHz	-751-70	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-78
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,732.90</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list auoted above dated:		6/1612003

**REQUIRED OPTIONS**

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ*	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

## Portable Trunked Digital

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5/ 25 130	12.5/ 25 130
<i>APCO P-25 TRUNKED STANDARDS</i>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	115 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-43	-45
Audio Distortion, % maximum	3	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad. dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-78
Speaker Audio Output, milliwatts	350	500
Audio Distortion. % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ. dBm	-116	-119
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		611612003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

## EF Johnson Company – Phase II

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	38	38
Frequency Stability (-30 °C to + 60 °C), PPM	± 2.5	± 2.0
Channel Spacing, kHz	12.5 / 25 / 30	12.5 / 25 / 30
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/5 selectable (Low/High)	1/5 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-57	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-60	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation. dB	-60	-78
Speaker Audio Output, milliwatts	350	500
Audio Distortion. % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,732.90</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	160	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	2	± 2.0
Channel Spacing, kHz	12.5/12.0/12.5	12.5 / 25
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ*	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Trunked Digital****UHF 450-470 Quality Category B**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	40	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	2	± 2.0
Channel Spacing, kHz	12.5/20/25	12.5 / 25
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-70	-70
FM Noise, dB	-45	-45
Audio Distortion, % maximum	2	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-68	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-75	-77
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		611612003

**REQUIRED OPTIONS**

<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages attached for complete Accessories and Options</b>	

**EF Johnson Company – Phase II****Portable Trunked Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	5	± 2.0
Channel Spacing, kHz	12.5120125	12.5 125
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	114 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-43	-45
Audio Distortion, % maximum	5	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25112.5 kHz	-701-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-77
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carving Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II****Portable Trunked Digital****UHF 450-470 Quality Category D**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	20	62
Frequency Stability (-30 °C to + 60 °C), PPM	5	± 2.0
Channel Spacing, kHz	12.5/20/25	12.5 / 25
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/4 selectable (Low/High)	1/4 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-70
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25112.5 kHz	-701-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-77
Speaker Audio Output, milliwatts	350	500
Audio Distortion. % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		611612003

<b>REOUINED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
<b>250-5</b> 100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Promammable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**EF Johnson Company – Phase II****Portable Trunked Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	48	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	1.5	± 1.5
Channel Spacing, kHz	12.5125	12.5125
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	113 selectable (Low/High)	113 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-60	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	2	2
Audio Response (per TWEIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-119	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-75/-63	-75
Spurious and Image Rejection, dB	-75	-75
Intermodulation, dB	-74	-74
Speaker Audio Output, milliwatts	500	500
Audio Distortion, % maximum	2	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-119	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		611612003

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Vehicular Battery or Nominal 120 VAC, 60 HZ*	\$97.50
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
n/a	RF Power Amplifiers Option	n/a
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	Paging Decoder Option	n/a
<b>OPTIONAL OPTIONS</b>		
n/a	Vehicular Charger/Console Option	n/a
<b>See Attached</b>	<b>See Price Pages for complete Accessories and Options</b>	

## EF Johnson Company - Phase II

## Portable Trunked Digital

## UHF 806-870 Quality Category C

	STANDARD SPECIFICATION	BIDDER'S SPECIFICATION
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	14	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 °C to + 60 °C), PPM	2.5	± 1.5
Channel Spacing, kHz	12.5/25	12.5/25
APCO P-25 TRUNKED STANDARDS		
<b>TRANSMITTER</b>		
RF Power Output, Watts	1/3 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-70/-65	-75
Spurious and Image Rejection, dB	-70	-75
Intermodulation, dB	-70	-74
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5 100 Series
Prices are based on price list quoted above dated:		6/1 612003

## EF Johnson Company – Phase II

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-510	Battery Charger/Dual Power Option	\$ 97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
<b>OPTIONAL OPTIONS</b>		
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a

**Portable Trunked Digital**

	<b>STANDARD SPECIFICATION</b>	<b>BIDDER'S SPECIFICATION</b>
<b>GENERAL</b>		
Number of Channels/Modes/Personalities	2	256
Operational Bandwidth/Maximum Frequency Separation, MHz	64	64
Frequency Stability (-30 "C to + 60 "C), PPM	2.5	± 1.5
Channel Spacing, kHz	12.5125	12.5/25
<b>APCO P-25 TRUNKED STANDARDS</b>		
<b>TRANSMITTER</b>		
RF Power Output, Watts	113 selectable (Low/High)	1/3 selectable (Low/High)
Radiated Spurious & Harmonic Emission, dB	-45	-60
FM Noise, dB	-40	-45
Audio Distortion, % maximum	5	2
Audio Response (per TIA/EIA 603)	+1, -3	+1, -3
<b>RECEIVER</b>		
Sensitivity, EIA 12 dB Sinad, dBm	-116	-119
Selectivity, adj. channel (dB), 25/12.5 kHz	-60/-55	-75
Spurious and Image Rejection, dB	-65	-75
Intermodulation, dB	-65	-74
Speaker Audio Output, milliwatts	350	500
Audio Distortion, % maximum	5	2
Static BER sensitivity @ 5% referenced @ 12.5 KHZ, dBm	-116	-119
<b>Price FOB Destination freight prepaid &amp; included in price</b>		<b>\$1,722.50</b>
<b>OTHER INFORMATION:</b>		
Prices are based on Manufacturer's price list entitled:		5100 Series
Prices are based on price list quoted above dated:		6/16/2003

**EF Johnson Company – Phase II**

<b>REQUIRED OPTIONS</b>		
<b>Part Number</b>	<b>Description</b>	<b>Price</b>
250-5100-210	Battery Charger/Dual Power Option	\$97.50
included	Emergency Button Option	
included	Position Rotary Channel/Mode Select Switch Option	
included	Low Battery Alert Tone Option	
included	Programmable Button Option	
included	Push-to-talk ID Transmission Option	
included	Alphanumeric Display Option	
included	Adaptive Transmitter Power Control Option	
51X3	Dual Tone Multi Frequency encoder and Key Pad Option	\$160.55
585-5100-120	Leather Carrying Case Option	\$45.50
589-0015-058	External Speaker/Microphone Option	\$84.50
n/a	RF Power Amplifiers Option	n/a
n/a	Paging Decoder Option	n/a
n/a	Vehicular Charger/Console Option	n/a