

## SPEC SHEET

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER



THE FUTURE OF BUSINESS COMMUNICATION, DELIVERED TODAY

# MTR3000 BASE STATION / REPEATER & SATELLITE RECEIVER

The MTR3000 is a robust, high powered base station / repeater that offers reliability, future expandability, and the ease of migration from analog to digital technology. It integrates voice and data seamlessly, offers enhanced features that are easy to use and delivers increased capacity while the MTR3000 satellite receiver model helps enhance analog coverage. So no matter your needs, the MTR3000 provides a flexible communication solution from the field to the factory floor.

## SPEC SHEET

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

### HIGH POWERED PERFORMANCE

The MTR3000 is the ideal high power base station/repeater solution for MOTOTRBO™ digital two-way radio systems. Because MOTOTRBO uses TDMA digital technology, it delivers integrated voice and data, twice the calling capacity, plus clearer voice communications. With its integrated 100W power amplifier and AC/DC power supply, the MTR3000 has minimal cabling, rack space, expense and overall complexity. The MTR3000 operates in digital mode in MOTOTRBO Conventional, IP Site Connect, Capacity Plus, Linked Capacity Plus and Connect Plus systems delivering increased capacity, spectral efficiency, integrated data applications, and enhanced voice communications. In addition, the MTR3000 can also operate in analog mode for conventional and LTR®/PassPort® Trunking systems providing a flexible high power base station/repeater.

### SERVICEABILITY

We designed the MTR3000 for easy serviceability. You can remotely or locally monitor the performance of your system with repeater diagnostic control software. The modular based design of the MTR3000 allows you to quickly replace components with functionally separate Field Replaceable Units when needed. Feature upgrades are easy with our software-based design and direct access to service ports (no need to remove even the front panel) allows for fast installation and maintenance time. Plus, every MTR3000 is backed by a two-year warranty.

### ADDED FUNCTIONALITY

MOTOTRBO offers added functionality, including dispatch capability with the MIP 5000 VoIP console, enhanced call signaling, basic and enhanced privacy-scrambling, option board expandability and compatibility with SCADA solutions for utility and public service monitoring and alarms. Plus digital telephone interconnect capability to enable communication between radios and landline or mobile phones as well as a transmit interrupt suite – with voice interrupt, emergency voice interrupt or data over voice interrupt – to prioritize critical communication the moment you need it. Its wireline capability enables Integrated Tone Remote Control and DC Remote Control functionality with balanced audio. For improved analog subscriber talk in performance, the MTR3000 allows for voting capability with legacy Spectra-TAC and DIGITAC comparator systems. Analog voting capability is available in the base station/repeater or satellite receiver and if used in the base station/repeater, it can be redeployed to full station capability to accommodate your future needs.

### EXPANDED CAPACITY AND COVERAGE

Your workforce is hard at work every day – picking up loads, making road repairs, providing security, responding to guest requests or restoring power after a storm. That's why you need the proven performance of MOTOTRBO radio systems for non-stop communication no matter the size of your work force, no matter where they go.

The MTR3000 supports MOTOTRBO's IP Site Connect dramatically improves customer service and productivity by using the Internet to extend coverage to users anywhere in the world. Our scalable, single-site Capacity Plus solution expands capacity to over 1,000 users without adding new frequencies. Linked Capacity Plus leverages the high capacity of Capacity Plus, with the wide area coverage capabilities of IP Site Connect to keep your staff at up to five sites connected with an affordable wide area trunking solution. Connect Plus multi-site digital trunking enables you to accommodate the high volume, wide area communication your business requires. Whether you need coverage at a single site or across multiple sites, MOTOTRBO can be scaled to meet your needs.

### MIGRATE AT YOUR OWN PACE

Keeping operations running smoothly during a change in communication systems is vital to your business. It's easy to migrate to digital with MOTOTRBO because radios operate in analog and digital mode. The dynamic mixed mode repeater functionality supported by the MTR3000 streamlines automatic switching between analog and digital calls so you can begin using MOTOTRBO radios on your existing analog system. When your time and budget allow you can begin migrating to digital at your own pace.

In addition, you can leverage your current investment in existing MTR2000 base station/repeaters. With a convenient form factor, and in minimal time, you can convert an MTR2000 base station/repeater to a MTR3000 with a simple upgrade kit!

**SPEC SHEET**

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

# UPGRADING TO DIGITAL MADE EASY

## MTR2000 MOTOTRBO™ DIGITAL UPGRADE KIT

Getting the most out of your investments is important to your business. With the MTR2000 MOTOTRBO Digital Upgrade Kit , you can begin enjoying the benefits of a MOTOTRBO digital two-way radio system by leveraging your current investment in MTR2000 base station/repeater equipment and upgrading them to the newer MTR3000 model.

The convenient design of the digital upgrade kit promotes reuse of existing MTR2000 equipment with a simple, 4-step process that is economic and easy to do. Turn your existing MTR2000 base station / repeater into a robust, reliable, high powered MTR3000 base station / repeater in less than 15 minutes!

### THE MTR2000 MOTOTRBO DIGITAL UPGRADE KIT CONSISTS OF THE FOLLOWING COMPONENTS:

- Exciter
- Receiver
- Station Control Module
- Front Bezel
- TORX Screws (not shown)
- MTR3000 FCC upgrade label (not shown)



**STEP 1:** Remove front panel cover of MTR2000 and RF cables- Take out Control Exciter Receiver Assembly (two screws)

**STEP 2:** Assemble the MOTOTRBO Control Exciter Receiver Assembly(8 screws)

**STEP 3:** Insert the core module and secure the station (2 screws)

**STEP 4:** Reconnect RF cables and put on new front cover (configure with CPS and tune)



**MTR 2000**



**MTR 2000 Control Exciter Receiver Assembly**



**MTR 3000**

Please note the following items will be needed to do the upgrade but are not included with the **MTR2000 MOTOTRBO DIGITAL UPGRADE KIT:**

- TORX T20 Screw Driver
- Type A to Type B USB cable (DDN9957)
- Computer with installed Customer Programming Software (CPS) (RVN5115/GMVN5141/PMVN4130)
- Optional: Ethernet cable for IP Site Connect and Capacity Plus (3085393Y33)

**SPEC SHEET**

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

# MTR3000 SATELLITE RECEIVER SPECIFICATIONS

RECEIVER (VHF)		
T7713A - MTR3000		
Frequency	136-174 MHz	
Selectivity (TIA603)	25 kHz / 12.5 kHz	80 dB (90 dB typical) / 75 dB (82 dB typical)
Selectivity (TIA603D)	25 kHz / 12.5 kHz	80 dB (90 dB typical) / 50 dB (60 dB typical)
Analog Sensitivity 12 dB SINAD	0.30 uV (0.22 uV typical)	
Signal Displacement Bandwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz
Intermodulation Rejection	25 kHz/12.5 kHz	85 dB
Spurious and Image Response Rejection	85 dB (95 dB typical)	
FM Hum and Noise (750us de-emphasis)	25 kHz / 12.5 kHz	50 dB (56 dB typical) / 45 dB (52 dB typical)

RECEIVER (UHF)		
T7713A - MTR3000		
Frequency	403-470, 450-524 MHz	
Selectivity (TIA603)	25 kHz / 12.5 kHz	80 dB (86 dB typical) / 75 dB (78 dB typical)
Selectivity (TIA603D)	25 kHz / 12.5 kHz	75 dB (85 dB typical) / 45 dB (60 dB typical)
Analog Sensitivity 12 dB SINAD	0.30 uV (0.22 uV typical)	
Signal Displacement Bandwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz
Intermodulation Rejection	25 kHz/12.5 kHz	85 dB
Spurious and Image Response Rejection	85 dB (typical 95 dB)	
FM Hum and Noise (750us de-emphasis)	25 kHz / 12.5 kHz	50 dB nominal / 45 dB nominal

RECEIVER (800/900 MHZ)		
T7713A - MTR3000		
Frequency	806 - 825 & 896 - 902 MHz	
Selectivity (TIA603)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	
Selectivity (TIA603D)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	
Analog Sensitivity 12 dB SINAD	0.28 uV ( 0.21 uV typical)	
Signal Displacement Bandwidth	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	
Intermodulation Rejection	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	
Spurious and Image Response Rejection	90 dB	
FM Hum and Noise (750us de-emphasis)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	

GENERAL SPECIFICATIONS	
T7713A - MTR3000	
Number of Frequencies	Up to 16
Modulation	FM
Frequency Generation	Synthesized
Channel Spacing	12.5 kHz, 25 kHz, 30 kHz
Temperature Range	-30°C to +60°C
Antenna Connector	Type "N" Female
AC Operation	85-264 VAC, 47-63 Hz
DC Operation	21.6-32 VDC

	DIMENSIONS	WEIGHT
Satellite Receiver	5.25 x 19 x 16.5 in. (133 x 483 x 419 mm)	40 lbs (19 kg)
Audio Response	+1/-3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line output	
Audio Distortion	Less than 3% (1.5% typical) at 1000 Hz; 60% RSD	
Line Output	330 mV (RMS) @60% RSD	
RF Input Impedance	50 Ohms	

FCC TYPE ACCEPTANCE			
FREQUENCY RANGE IN MHZ	MODEL	TYPE	US TYPE ACCEPTANCE NUMBER
136 - 174	T7713A	Receiver	ABZ89FR3794
403 - 470	T7713A	Receiver	ABZ89FR4824
450 - 512	T7713A	Receiver	ABZ89FR4826
806 - 825 & 896 - 902	T7713A	Receiver	ABZ89FR5818

INPUT CURRENT (T3000A) WITH WIRELINE CARD		
	AC LINE 117 VOLTS / 220 VOLTS	28 VDC D/C BATTERY REVERT, NEG. GND.
VHF		
100W Standby	0.4A / 0.4A	0.8A
100W Transmit	3.5A / 1.9A	12.2A
UHF		
100W Standby	0.4A / 0.4A	0.8A
100W Transmit	3.3A / 1.8A	11.5A
800 / 900 MHz		
100W Standby	0.4A / 0.4A	0.9A
100W Transmit	3.4A / 1.9A	12.0A

Specifications per TIA/EIA 603D unless otherwise noted  
 Product meets ETSI 300-086 & ETSI 300-113  
 RoHS compliant; UL Listed  
 Specifications subject to change without notice.

**SPEC SHEET**

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

# MTR3000 BASE STATION/REPEATER VHF SPECIFICATIONS

GENERAL SPECIFICATIONS		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Number of Frequencies			Up to 16
Modulation			FM & 4FSK
Frequency Generation			Synthesized
Channel Spacing	Analog/Digital	12.5 kHz, 25 kHz / 12.5 kHz (6.25e compliant)	
Mode of Operation		Simplex / Semi-Duplex / Duplex	
Temperature Range		-30°C to +60°C	
Antenna Connectors		Transmit and Receive, Type "N" Female	
AC Operation		85-264 VAC, 47-63 Hz	
DC Operation		28.6 VDC (25.7-30.7 VDC full rated output power)	
Dimensions		5.25 in H x 19 in W x 16.5 in L 133 mm H x 483 mm W x 419 mm L	
Weight		40 lbs (19 kg)	

VHF INPUT CURRENT (T3000A)		
	AC LINE 117 VOLTS / 220 VOLTS	28 VDC D/C BATTERY REVERT, NEG. GND.
100 W standby	0.4A / 0.4A	0.8A
100 W Transmit	3.5A/ 1.9A	12.2A

FCC TYPE ACCEPTANCE				
FREQUENCY RANGE IN MHZ	MODEL	TYPE	POWER OUTPUT IN WATTS	US TYPE ACCEPTANCE NUMBER
136-174	T3000A	Transmitter	8-100	ABZ89FC3793
136-174	T3000A	Receiver	N/A	ABZ89FR3794
136-174	T2003A	Transmitter	25 - 100	ABZ89FC3795
136-174	T2003A	Receiver	N/A	ABZ89FR3796
136-174	T2003A	Transmitter	1-30 / 40	ABZ89FC3797

TRANSMITTER (VHF)		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency		136-174 MHz	136-154, 150-174 MHz
Power Output (Continuous Duty)		8-100 watts	1-30/40 watts, 25-100 watts
Electronic Bandwidth			Full Band
Output Impedance			50 Ohms
Intermodulation Attenuation		55 dB	40 dB for 40W and 100W stations; 70 dB for 30W station
Maximum Deviation (RSD)	25 kHz/12.5 kHz		±5 kHz / ±2.5 kHz
Audio Sensitivity			60% RSD @ 80 mV RMS
Spurious and Harmonic Emissions Attenuation		90 dB	85 dB
FM Hum and Noise (750 µs de-emphasis)	25 kHz / 12.5 kHz	50 dB nomina (55 dB typical)  , 45 dB nominal (52 dB typical)	
Frequency Stability (for temperature and aging variation)		1.5 ppm/external Ref (optional)	
Audio Response		+1,-3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line input	
Audio Distortion		Less than 3% (1% typical) at 1000 Hz; 60% RSD 30kHz	
Emission Designators		FM Modulation: 12.5 kHz: 11K0F3E; 25 kHz, 30 kHz: 16K0F3E; 4FSK Modulation: 12.5 kHz - Data Only: 7K60FXD, 7K60F7D ; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E, 7K60F7E: 12.5 kHz - Data & Voice: 7K60F1W, 7K60F7W	

RECEIVER (VHF)		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency			136-174 MHz
Selectivity (TIA603)	25 kHz / 12.5 kHz	80 dB (90 dB typical) / 75 dB (82 dB typical)	
Selectivity (TIA603D)	25 kHz / 12.5 kHz	80 dB (90 dB typical) / 50 dB (60 dB typical)	
Analog Sensitivity 12 dB SINAD		0.30 uV (0.22 uV typical)	
Digital Sensitivity 5% BER		0.30 uV (0.20 uV typical)	
Signal Displacement Bandwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz	
Intermodulation Rejection	25 kHz/12.5 kHz	85 dB	
Spurious and Image Rejection		85 dB (95 dB typical)	
Audio Response		+1,-3 dB from 6 dB per octave de-emphasis; 300-3000 Hz referenced to 1000 Hz at line output	
Audio Distortion		Less than 3% (1% typical) at 1000 Hz, 60% RSD	
Line Output		330 mV (RMS) @ 60% RSD	
FM Hum and Noise (750µs de-emphasis)	25 kHz / 12.5 kHz	50 dB (56 dB typical) / 45 dB (52 dB typical)	
RF Input Impedance		50 Ohms	

Industry Canada Approval:  
IC ID 109AB-3793;  
IC Model T3000-VHF.  
Specifications per TIA/EIA 603D unless otherwise noted.  
Product meets:  
ETSI 300-086;  
ETSI 300-113.  
CE Marked  
RoHS compliant  
UL Listed  
Digital Protocol  
ETSI 102 361-1, -2, -3;  
AMBE +2™ Vocoder  
Specifications subject to change without notice.



**SPEC SHEET**

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

# MTR3000 BASE STATION/REPEATER UHF SPECIFICATIONS

GENERAL SPECIFICATIONS		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Number of Frequencies			Up to 16
Modulation			FM & 4FSK
Frequency Generation			Synthesized
Channel Spacing	Analog/Digital	12.5 kHz, 25 kHz / 12.5 kHz (6.25e compliant)	
Mode of Operation		Simplex / Semi-Duplex / Duplex	
Temperature Range		-30°C to +60°C	
Antenna Connectors		Transmit and Receive, Type "N" Female	
AC Operation		85-264 VAC, 47-63 Hz	
DC Operation		28.6 VDC (25.7-30.7 VDC full rated output power)	
Dimensions		5.25 in H x 19 in W x 16.5 in L 133 mm H x 483 mm W x 419 mm L	
Weight		40 lbs (19 kg)	

UHF INPUT CURRENT (T3000A)		
	AC LINE 117 VOLTS /220 VOLTS	28 VDC D/C BATTERY REVERT, NEG. GND.
100 W standby	0.4A / 0.4A	0.8A
100 W Transmit	3.3A/ 1.8A	11.5A

FCC TYPE ACCEPTANCE				
FREQUENCY RANGE IN MHZ	MODEL	TYPE	POWER OUTPUT IN WATTS	US TYPE ACCEPTANCE NUMBER
406.1 - 470	T3000A	Transmitter	8 - 100	ABZ89FC4823
403-470	T3000A	Receiver	N/A	ABZ89FR4824
470 - 512	T3000A	Transmitter	8-100	ABZ89FC4825
450-512	T3000A	Receiver	N/A	ABZ89FR4826
406.1 - 470	T2003A	Transmitter	25 - 100	ABZ89FC4827
406.1 - 470	T2003A	Transmitter	2 - 30/40	ABZ89FC4829
403 - 470	T2003A	Receiver	N/A	ABZ89FR4828

TRANSMITTER (UHF)		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency		403-470, 450-524 MHz	403-470 MHz
Power Output (Continuous Duty)		8-100 watts	2-30/40 watts; 25-100 watts
Electronic Bandwidth			Full Band
Output Impedance			50 Ohms
Intermodulation Attenuation		55 dB	40 dB for 40W and 100W stations; 70 dB for 30W station
Maximum Deviation (RSD)	25 kHz/12.5 kHz		±5 kHz / ±2.5 kHz
Audio Sensitivity			60% RSD @ 80 mV RMs
Spurious and Harmonic Emissions Attenuation		90 dB	85 dB
FM Hum and Noise (750 μs de-emphasis)	25 kHz / 12.5 kHz		50 dB nominal, 45 dB nominal
Frequency Stability (for temperature and aging variation)			1.5 ppm/external Ref (optional)
Audio Response		+1,-3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line input	
Audio Distortion		Less than 3% (1% typical) at 1000 Hz; 60% RSD	
Emission Designators		FM Modulation: 12.5 kHz: 11K0F3E; 25 kHz: 16K0F3E 4FSK Modulation: 12.5 kHz - Data Only: 7K60FXD, 7K60F7D; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E, 7K60F7E; 12.5 kHz - Data & Voice: 7K60F1W, 7K60F7W	

RECEIVER (UHF)		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency		403-470, 450-524 MHz	403-470 MHz
Selectivity (TIA603)	25 kHz / 12.5 kHz	80 dB (86 dB typical) / 75 dB (78 dB typical)	
Selectivity (TIA603D)	25 kHz / 12.5 kHz	75 dB (85 dB typical) / 45 dB (60 dB typical)	
Analog Sensitivity 12 dB SINAD		0.30 uV (0.22 uV typical)	
Digital Sensitivity 5% BER		0.30 uV (0.20 uV typical)	
Signal Displacement Bandwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz	
Intermodulation Rejection	25 kHz/12.5 kHz	85 dB	
Spurious and Image Rejection		85 dB (95 dB typical)	
Audio Response		+1,-3 dB from 6 dB per octave de-emphasis; 300-3000 Hz referenced to 1000 Hz at line output	
Audio Distortion		Less than 3% (1.5% typical) at 1000 Hz, 60% RSD	
Line Output		330 mV (RMs) @ 60% RSD	
FM Hum and Noise (750us de-emphasis)	25 kHz / 12.5 kHz	50 dB nominal / 45 dB nominal	
RF Input Impedance		50 Ohms	

Industry Canada Approval:  
 IC ID 109AB-T3000;  
 IC model T3000-UHFR1.  
 Specifications per TIA/EIA 603D unless otherwise noted.  
 Product meets:  
 ETSI 300-086;  
 ETSI 300-113.  
 CE Marked  
 RoHS compliant  
 UL Listed  
 Digital Protocol  
 ETSI 102 361-1, -2, -3;  
 AMBE +2™ Vocoder  
 Specifications subject to change without notice.





**SPEC SHEET**

MTR3000 BASE STATION/REPEATER , SATELLITE RECEIVER

# MTR3000 BASE STATION/REPEATER 800/900 MHZ SPECIFICATIONS

GENERAL SPECIFICATIONS		
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Number of Frequencies		Up to 16
Modulation		FM & 4FSK
Frequency Generation		Synthesized
Channel Spacing	Analog/Digital	12.5 kHz, 25 kHz / 12.5 kHz (6.25e compliant)
Mode of Operation		Semi-Duplex / Duplex
Temperature Range		-30°C to +60°C
Antenna Connectors		Transmit and Receive, Type "N" Female
AC Operation		85-264 VAC, 47-63 Hz
DC Operation		28.6 VDC (24.7-30.7 VDC full rated output power)
Dimensions		5.25 in H x 19 in W x 16.5 in L 133 mm H x 483 mm W x 419 mm L
Weight		40 lbs (19 kg)

800/900 MHZ INPUT CURRENT (T3000A)		
	AC LINE 117 VOLTS / 220 VOLTS	28 VDC D/C BATTERY REVERT, NEG. GND.
100 W standby	0.4A / 0.4A	0.9A
100 W Transmit	3.4A/ 1.9A	12.0A

FCC TYPE ACCEPTANCE				
FREQUENCY RANGE IN MHZ	MODEL	TYPE	POWER OUTPUT IN WATTS	US TYPE ACCEPTANCE NUMBER
851 - 870 & 935 - 941	T3000A	Transmitter	8-100	ABZ89FC5817
806 - 825 & 896 - 902	T3000A	Receiver	N/A	ABZ89FR5818
851 - 870	T2003A	Transmitter	20-75	ABZ89FC5819
806 - 825	T2003A	Receiver	N/A	ABZ89FR5820
935 - 941	T2003A	Transmitter	20-75	ABZ89FC5821
896 - 902	T2003A	Receiver	N/A	ABZ89FR5822

TRANSMITTER (800/900 MHZ)		
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency	851 - 870 & 935 - 941 MHz	851 - 870, 935 - 941 MHz
Power Output (Continuous Duty)	8-100 watts	20-75 watts
Electronic Bandwidth		Full Band
Output Impedance		50 Ohms
Intermodulation Attenuation	55 dB	50 dB
Maximum Deviation (RSD)	25 kHz/12.5 kHz	±5 kHz, ±2.5 kHz / ±2.5 kHz
Audio Sensitivity		60% RSD @ 80 mV RMS
Spurious and Harmonic Emissions Attenuation	90 dB / 86 dB	80 dB / 80 dB
FM Hum and Noise (750 µs de-emphasis)	25 kHz / 12.5 kHz	50 dB nominal, 45 dB nominal / 45 dB nominal
Frequency Stability (for temperature and aging variation)		0.1ppm/ external Ref (optional)
Audio Response		+1, -3 dB from 6 dB per octave pre-emphasis; 300-3000 Hz referenced to 1000 Hz at line input
Audio Distortion		Less than 3% (1% typical) at 1000 Hz; 60% RSD
Emission Designators		FM Modulation: 800 MHz: 12.5 kHz: 11K0F3E; 25 kHz: 16K0F3E; 900 MHz: 12.5 kHz: 11K0F3E 4FSK Modulation: 12.5 kHz - Data Only: 7K60FXD, 7K60F7D; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E, 7K60F7E; 12.5 kHz - Data & Voice: 7K60F1W, 7K60F7W

RECEIVER (800/900 MHZ)		
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS
Frequency	806 - 825 & 896 - 902 MHz	806 - 825, 896 - 902 MHz
Selectivity (TIA603)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	85 dB , 75 dB / 75 dB
Selectivity (TIA603D)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	80 dB (87 dB typical), 55 dB (62 dB typical) / 55 dB (62 dB typical)
Analog Sensitivity 12 dB SINAD		0.28 uV ( 0.21 uV typical)
Digital Sensitivity 5% BER		0.28 uV
Signal Displacement Bandwidth	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	2 kHz, 1 kHz / 1 kHz
Intermodulation Rejection	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	85 dB (90 dB typical) / 85 dB (90 dB typical)
Spurious and Image Response Rejection		90 dB
Audio Response		+1, -3 dB from 6 dB per octave pre-emphasis, 300 - 3000 Hz referenced to 1000 Hz at line output
Audio Distortion		Less than 3%(1.5% typical) at 1000 Hz, 60% RSD
Line Output		330 mV (RMS) @60% RSD
FM Hum and Noise (750us de-emphasis)	800 MHz: 25 kHz, 12.5 kHz / 900 MHz: 12.5 kHz	50 dB nominal, 45 dB nominal / 45 dB nominal
RF Input Impedance		50 Ohms

Industry Canada Approval:  
 IC ID 109AB-5817;  
 IC Model T3000-8/900  
 Specifications per TIA/EIA 603D unless otherwise noted.  
 Product meets:  
 ETSI 300-086;  
 ETSI 300-113.  
 RoHS compliant  
 UL Listed  
 Digital Protocol  
 ETSI 102 361-1, -2, -3;  
 AMBE +2™ Vocoder  
 Specifications subject to change without notice.



**SPEC SHEET**

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For more information on how to make your business more efficient  
and better connected, visit [motorolasolutions.com/mototrbo](http://motorolasolutions.com/mototrbo)

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