



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.

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 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 the MLC8000 comparator as well as the 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. 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!



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 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)



MTR3000 SATELLITE RECEIVER SPECIFICATIONS

RECEIVER (VHF)			
			T7713A - MTR3000
Frequency			136-174 MHz
Selectivity (TIA603)	25 kHz / 12.5 k	Hz	80 dB (90 dB typical) / 75 dB (82 dB typical)
Selectivity (TIA603D)	25 kHz / 12.5 k	Hz	80 dB (90 dB typical) / 50 dB (60 dB typical)
Analog Sensitivity 12 dl	BSINAD		0.30 uV (0.22 uV typical)
Signal Displacement Bar	ndwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz
Intermodulation Rejectio	n	25 kHz/12.5 kHz	85 dB
Spurious and Image Res	ponse Rejection		85 dB (95 dB typical)
FM Hum and Noise (750	us 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 k	Hz	80 dB (86 dB typical) / 75 dB (78 dB typical)
Selectivity (TIA603D)	25 kHz / 12.5 k	Hz	75 dB (85 dB typical) / 45 dB (60 dB typical)
Analog Sensitivity 12 de	3 SINAD		0.30 uV (0.22 uV typical)
Signal Displacement Bar	ndwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz
Intermodulation Rejectio	n	25 kHz/12.5 kHz	85 dB
Spurious and Image Res	ponse Rejection		85 dB (typical 95 dB)
FM Hum and Noise (750)	us 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	85 dB,75dB/75dB
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)
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
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

GENERAL SPECIFICATIONS			
	T7713A - MTR3000		
Number of Frequencies	Up to 16		
Modulation	FM		
Frequency Generation	Synthes	sized	
Channel Spacing	12.5 kHz, 25 k	:Hz, 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. 40 lbs (19 kg) (133 x 483 x 419 mm)		
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.



MTR3000 BASE STATION/REPEATER VHF SPECIFICATIONS

GENERAL SPECIFICATIONS			
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS	
Number of Frequencies	L	Jp to 16	
Modulation	FN	1 & 4FSK	
Frequency Generation	Syı	nthesized	
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)		
Dimentions	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	ТҮРЕ	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 μ s de-emphasis) 25 kHz /12.5 kHz	50 dB nomina (55 dB typical) I, 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;		

FM Modulation: 12.5 kHz: 11K0F3E; 25 kHz , 30 kHz: 16K0F3E; 4FSK Modulation: 12.5 kHz - Data Only: 7K60FXD; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E: 12.5 kHz - Data & Voice: 7K60F1W

RECEIVER (VHF)			
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS	
Frequency		136-174 MHz	
Selectivity (TIA603) 25 kHz / 12.5 kHz	80 dE	8 (90 dB typical) / 75 dB (82 dB typical)	
Selectivity (TIA603D) 25 kHz / 12.5 kHz	80 dE	B (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 out		
Audio Distortion	Less than 3% (1% 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 (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.



MTR3000 BASE STATION/REPEATER UHF SPECIFICATIONS

GENERAL SPECIFICATIONS			
	T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS	
Number of Frequencies	U	p 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 \	/AC, 47-63 Hz	
DC Operation	28.6 VDC (25.7-30.7 VDC full rated output power)		
Dimentions	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	ТҮРЕ	POWER OUTPUTIN 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	on	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 agi	ng 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; 7K60FXD; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E: 12.5 kHz - Data & Voice: 7K60F1W

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 k	Hz	80 dB (86 dB typical) / 75 dB (78 dB typical)	
Selectivity (TIA603D)	25 kHz / 12.5 k	Hz	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% BE	R		0.30 uV (0.20 uV typical)	
Signal Displacement Ban	dwidth	25 kHz/12.5 kHz	2 kHz / 1 kHz	
Intermodulation Rejection	1	25 kHz/12.5 kHz	85 dB	
Spurious and Image Reje	ction		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		than 3% (1.5% typical) at 1000 Hz, 60% RSD
Line Output			330 mV (RMs) @ 60% RSD	
FM Hum and Noise (750u	ıs 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 +2TM Vocoder
Specifications subject to change without notice.



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 Analo	g/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)		
Dimentions		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	ТҮРЕ	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	

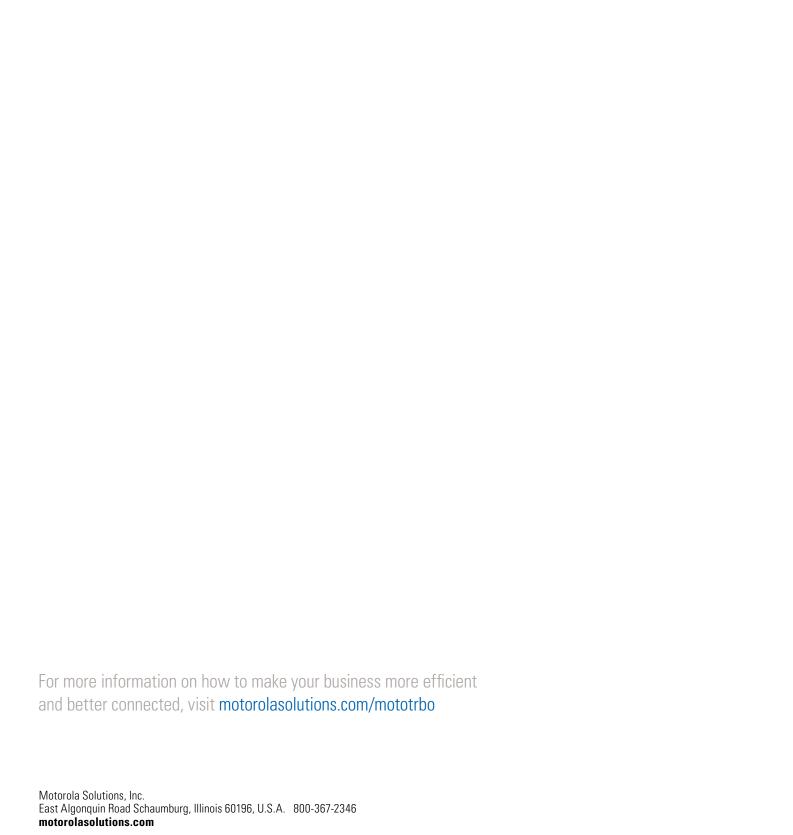
TRANSMITTER (800/900 MHZ)				
		T3000A - MTR3000	T2003A - UPGRADE KIT FOR MTR2000 STATIONS	
Frequency		851 - 870 & 935 - 941 MHz	851 - 870, 935 - 941 MHz	
Power Output (Continuous Duty)		8-100 watts	20-75 watts	
Electronic Bandwidth		Full Band		
Output Impedance		50 Ohms		
Intermodulation Attenuation		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 Attenuati	on	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 agi	ng 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		

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 , 7K60F1D; 12.5 kHz - Voice Only: 7K60FXE, 7K60F1E; 12.5 kHz - Data & Voice: 7K60F1W

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) $800\mathrm{MHz}$: 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; RoHS compliant UL Listed Digital Protocol ETSI 102 361-1, -2, -3; AMBE +2™ Vocoder Specifications subject to change without notice.





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SPEC SHEET

MTR3000 BASE STATION/REPEATER, SATELLITE RECEIVER