

MOTOTRBO

PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM

MOTOTRBO PROFESSIONAL DIGITAL TWO-WAY RADIO SYSTEM THE FUTURE OF TWO-WAY RADIO

Motorola is a company of firsts with a rich heritage of innovation. We continue to invent what's next connecting people, delivering mobility and making technology personal. Versatile and powerful, MOTOTRBO combines the best in two-way radio functionality with digital technology, making it the ideal communication solution for your business. You get enhanced features, increased capacity, integrated data applications, exceptional voice quality and extended battery performance. This means more productive employees and lower operating costs for your business.



- Integrates Voice and Data into one device to increase your operational efficiency and support integrated applications including MOTOTRBO Text Messaging Services. Also features an integrated GPS module for use with third-party locationtracking applications.
- Uses Time-Division Multiple-Access (TDMA) digital technology to provide **Twice The Calling Capacity** (as compared to analog or FDMA radios) for the price of one frequency license. A second call doesn't require a second repeater, saving you equipment costs.
- In digital mode, provides Clearer Voice Communications throughout the coverage area, as compared to analog radios, rejecting static and noise.
- Offers Enhanced Battery Life. Digital TDMA two-way portable radios can operate up to 40 percent longer between recharges compared to typical analog radios.

- Provides Easy Migration from analog to digital with the ability to operate in both analog and digital modes and utilizing the Dynamic Mixed Mode* repeater functionality allows for automatic switching between analog and digital mode on the same repeater.
- Meets **Demanding Specifications** IP57 for submersibility in water (portable models), U.S. Military 810 C, D, E and F, and Motorola standards for durability and reliability.
- Is Intrinsically Safe*, when purchased and equipped with an FM battery, and can be used in locations where flammable gas, vapors or combustible dust may be present.
- Utilizes Motorola's State-Of-The-Art IMPRES[™] Technology in batteries, chargers and audio accessories, providing longer talk time and clearer audio delivery.

- Features the Transmit Interrupt Suite* —voice interrupt, remote voice dekey, emergency voice interrupt —to help prioritize critical communication exactly when needed.
- The **IP Site Connect*** digital solution uses the Internet to extend coverage of your MOTOTRBO communication system to users anywhere in the world for dramatically improved customer service and increased productivity.
- **Capacity Plus*** is a scalable, singlesite digital trunking solution that can expand the capacity of your MOTOTRBO communication to over a thousand radio users without adding new frequencies.
- Motorola's Application Developer Program enables the development of customized data applications that adapt MOTOTRBO radios to meet the unique needs of your business.

MOTOTRBO™ Portable Radio

General Specifications*

General Specifications*						
	XiR P8260 Display Non GPS Model		XiR P8200 Non-Display Non-GPS Model			
	XiR P8268 Display GPS Model UHF	VHF	XiR P8208 Non-Display GPS Mo UHF			
Channel Capacity	1000	VIL		32		
requency	403-470 MHz 450-512 MHz	136-174 MHz	403-470 MHz 450-512 MHz	136-174 MHz		
Dimension (HxWxT) w/ 1500 mAh Lilon Battery	403-470 MHz 450-512 MHz 136-174 MHz 131.5 x 63.5 x 35.2 mm		131.5 x 63.5 x 35.2 mm			
Veight (with 1500 mAH Lilon Battery)	360g (12.7 oz)		360g (12.7 oz)			
with 2200 mAh Lilon Battery)	361g (12.8					
vith 1400 mAh Lilon FM Battery)	370g (12.0		361g (12.8 oz) 370g (13 oz)			
ower Supply	7.5V nomir		7.5V nominal			
CC Description	AZ489FT4876 AZ489FT4884	AZ489FT3815	AZ489FT4876 AZ489FT4884 AZ489FT3815			
verage battery life at 5/5/90 duty cycle with battery			A2400114070 A2400114004	A2400110010		
MPRES 1500 mAh Lilon Battery	Analog: 9 h		Analog	g: 9 hrs		
	Digital: 13 h		Digital: 13 hrs			
VPRES 2200 mAh Lilon Battery	Analog: 13.5		Analog: 13.5 hrs			
·····	Digital: 19 k		-	: 19 hrs		
MPRES FM 1400 mAh Battery	Analog: 8.5		-	: 8.5 hrs		
,	Digital: 12 h			: 12 hrs		
	Signal 121		Digital			
leceiver						
requencies	403-470 MHz 450-512 MHz	136-174 MHz	403-470 MHz 450-512 MHz	136-174 MHz		
hannel Spacing	12.5 kHz/ 25			z/ 25 kHz		
requency Stability	+/- 1.5 ppm (XiR			1 (XiR P8200)		
-30° C, +60° C, +25° C)	+/- 0.5 ppm (XiR					
nalog Sensitivity	0.35 uV (12 dB		+/- 0.5 ppm (XiR P8208) 0.35 uV (12 dB SINAD)			
	0.4 uV (20 dB S					
	0.4 uV (20 db 3			0.4 uV (20 dB SINAD)		
Digital Sensitivity	5% BER: 0.3			0.22 uV (typical) 5% BER: 0.3 uV		
ntermodulation	5% BER: 0.3		5% BEI	1. U.J UV		
IA603C	70 dB		70			
TSI			70 dB			
djacent Channel Selectivity	65 dB 60 dB @ 12.5	bill=		65 dB		
ajacent Channel Selectivity			60 dB @ 12.5 kHz 70 dB @ 25 kHz			
terreiteren Delisettere	70 dB @ 25	KHZ	70 dB @ 25 kHz 70 dB			
Spurious Rejection	70 dB 500 mW		500 mW			
			3% (typical)			
udio Distortion @ Rated Audio	3% (typica		-40 dB @ 12.5 kHz			
Hum and Noise	-40 dB @ 12.5		-40 dB @ 12.5 kHz -45 dB @ 25 kHz			
Audia Daaraa	-45 dB @ 25					
Audio Response	+ 1, -3 dB		+ 1, -3 dB -57 dBm			
Conducted Spurious Emission	-57 dBm		-57	aBm		
Fransmitter						
requencies	403-470 MHz 450-512 MHz	136-174 MHz	403-470 MHz 450-512 MHz	136-174 MHz		
hannel Spacing	12.5 kHz / 25			z/ 25 kHz		
requency Stability	+/- 1.5 ppm (XiR			n (XiR P8200)		
-30° C, +60° C, +25° C)	+/- 0.5 ppm (XiR	P0200/	+/- 0.5 ppm	n (XiR P8208)		
Yower Output	1).47	1147	1\\\/	114/		
ow Power	1₩	1W	1W	1W		
ligh Power	4W	5W	4W	5W		
Iodulation Limiting	+/- 2.5 kHz @ 12			2 @ 12.5 kHz		
M Hum and Noise	+/- 5.0 kHz @ 2 -40 dB @ 12.5			z @ 25 kHz		
FM Hum and Noise			-40 dB @ 12.5 kHz -45 dB @ 25 kHz			
Conducted / Radiated Emission	-45 dB @ 25		-45 dB @ 25 kHz -36 dBm < 1 GHz			
Conducted / Radiated Emission	-36 dBm < 1					
Adiacant Channel D	-30 dBm > 1 GHz a		-30 dBm > 1 GHz and < 4GHz			
Adjacent Channel Power	-60 dB @ 12.5		-60 dB @ 12.5 kHz			
udia Deenanaa	-70 dB @ 25		-70 dB @ 25 kHz			
Audio Response	+1, -3 dB		+1, -3 dB			
Audio Distortion	3%		3%			
M Modulation	12.5 kHz : 11k		12.5 kHz : 11K0F3E 25 kHz: 16K0F3E			
EOK Disidal Marshelation	25 kHz: 16K0					
FSK Digital Modulation	12.5 kHz Data Only			Only: 7K60FXD		
Nation Management	12.5 kHz Data & Voic		12.5 kHz Data & Voice: 7K60FXE AMBE+2 TM			
Digital Vocoder Type	AMBE+2 ^T		AMBE+2 ^{IM} ETSI-TS102 361-1			
Digital Protocol	ETSI-TS102 3	1-10	ETSI-TS	102 361-1		
200						
iPS			Environmental Specifications			
accuracy specs are for long-term tracking (95th perce		и автя signal strength)	Operating Temperature	-30° C / +60° C		
TFF (Time To First Fix) Cold Start	< 2 minutes		Storage Temperature	-40° C / +85° C		
TFF (Time To First Fix) Hot Start	< 10 seconds		Thermal Shock	Per MIL-STD		
orizontal Accuracy	< 10 meters		Humidity	Per MIL-STD		
			ESD	IEC-801-2KV		
actory Mutual Approvals			Water Intrusion	IEC 60529 - IP57		

Water Intrusion

IEC 60529 - IP57 MIL-STD 810D and E

 Factory Mutual Approvals
 Water Intrusion

 MOTOTRBO XIR Portable series radios have been certifi ed by FM Approvals in accordance with Canada and U.S. Codes as intrinsically
 Water Intrusion

 safe for use in Class I, II, III, Division 1, Groups C,D,E,F,G, when properly equipped with a Motorola FM approved battery option.
 Packaging Test

 They are also approved for use in Class I, Division 2, Groups A, B, C, D.
 Packaging Test

*Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements.

Conforms to EC 1999/5/EC (R&TTE - Radio and Telecommunications Terminal Equipment) EN 300 066 EN 300 113

MOTOTRBO™ Mobile Radio

$\begin the set of th$			XiR M8260 Display Non GPS Model XiR M8268 Display GPS Model		XiR M8220 Non-Display Non-GPS Model XiR M8228 Non-Display GPS Model					
attach 400.470 MeV 100.174 MeV 100.174 MeV 400.470 MeV 400.170 MeV 100.174 MeV Marge MeVMU1 0.11.175 S00 mm 1.80 M 0.180 MeV 1.80 MeV		U	HF	VHF	U	HF	VHF			
Immunestancy (AVXD) B1 1 TB 2 00 m. B1 1 TB 2 00 m. 18 B (10 No.) 18 B (10 No.) 18 B (10 No.) 18 B (10 No.) 18 B (10 No.) 2 A rate 38 A Article 38 A Article 14 B A rate 2 A rate 18 B (10 No.) 18 B (10 No.) 14 B A rate 2 A rate 18 B (10 No.) 18 B (10 No.) 14 B A rate 2 A rate 14 B A rate 18 B (10 No.) 14 B A rate 2 A rate 14 B A rate 12 B V (10 No.) 14 B A rate 2 A rate 14 B A rate 12 B V (10 No.) 14 B A rate 2 A rate 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 14 B A rate 2 A rate 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) 12 B V (10 No.) <td< td=""><td>hannel Capacity</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	hannel Capacity									
Indept		403-470 MHz			403-470 MHz					
Drame Data Into By Proven and Dy										
Index 0.81 Arms 1.500			1.8 kg (4.0	J lbs)		1.8 kg (4	.0 lbs)			
v B Task Judio 2 A mas 13.6 Mar 13.6 Mar 13.6 Mar 13.0 Mar	-		0.01.4 -			0.01.4				
i 4 B Anak Audo 14.5 A max 14.5 A max 14.5 A max CC Description 1.20V : AD259TT4061 140V : AD259TT4061 1.20V : AD250TT4001 1.20V										
Sourd Sught Image: Sourd Sught <thimage: sourd="" sught<="" th=""> Image: Sourd S</thimage:>										
CC Decription 1-399/ A220FT000 1-299/ A220FT000 7-299 A220FT000										
Image: Control Sector Process 25-4.0V AB220PT 1002 25-4.0V AB220PT 1002 5-4.5.V AB20PT 1002 International Sector Process 400-470.Mtrz 450-512.Mtrz 195-174.Mtrz 400-470.Mtrz 195-174.Mtrz 195-174		1-25\// · AB799ET4081			1-25\// · AR799FT4081					
Sector 402-470 MHz 126 FH2 MHZ <t< td=""><td>ee Beeenplien</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	ee Beeenplien									
squames 402-470 MHz 138-174 MHz 402-170 MHz 402-670 MHz 138-174 MHz squames 128 5 MHZ 26 MHz squames -4/0.5 gpm C6M M02200 -+1.5 gpm C6M M02200 -+1.5 gpm C6M M02200 -+1.5 gpm C6M M02200 squames -2/0.5 QPC - -4/0.5 gpm C6M M02200 -+1.5 gpm C6M M02200 -0.1 QU 172 dB S10001 gpm Semanting -0.3 QV 172 dB S10401 gpm Semanting -0.3 QV 172 dB S10401 -9.5 BER 0.3 QV -9.5 BER 0.3 QV -9.5 BER 0.3 QV AA202 75 dB 0.0 dB 75 dB 76 dB 0.0 dB						· · · · · ·				
Interell Specing 12.8 Har/2 State/ 12.8 Har/2 State/ 0.97 C. 40° C. 40° C. 4.7 15 ppm (XM M228) +7 15 ppm (XM M228) 0.97 C. 40° C. 4.0 5 ppm (XM M228) +7 15 ppm (XM M228) 0.97 C. 40° C. 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.4 uv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.4 uv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.6 Smooth 0.7 8 MS 80.98 76 dB 76 dB 100 dB 75 dB 70 dB 2.0 Liv (2.0 8 SMAD) 0.0 Liv (2.0 8 SMAD) 0.0 dB 72 dB 80 dB 70 dB 80 dB 80 dB 100 dB 70 dB 2.0 Liv (2.0 NV) 70 dB 80 dB 80 dB 100 dB 70 dB 70 dB 70 dB 80 dB 80 dB 10 dB 100 dB 7.0 H 10.0 H <td>eceiver</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	eceiver									
equency Set Autor equency Set Autor Set _ +10 5 gen VCM M0200	requencies	403-470 MHz	450-512 MHz	136-174 MHz	403-470 MHz	450-512 MHz	136-174 MHz			
3/2 C _ 402 °C	nannel Spacing		12.5 kHz/ 2	25 kHz		12.5 kHz/	25 kHz			
alag Sensitivity _ 0,4 \(1/2 db SINAD) _ 0,2 \(1/2 db SINAD) _ 0,	equency Stability		+/- 1.5 ppm (Xi	R M8260)		+/- 1.5 ppm (X	iR M8220)			
J J	30° C, +60° C, +25° C)		+/- 0.5 ppm (Xi	R M8268)		+/- 0.5 ppm (X	iR M8228)			
Image: memory intermediation 0.22 wf typical 0.22 wf typical dBSC 75 dB 76 dB 60 dB 60 dB 60 dB 76 dB 76 dB 60 dB 76 dB 60 dB 76 dB<	nalog Sensitivity		0.3 uV (12 dB	SINAD)		0.3 uV (12 dl	3 SINAD)			
gala Sensitivity with the sensitivity of the sensi			0.4 uV (20 dB	SINAD)	0.4 uV (20 dB SINAD)					
termoduktion ABQC TS de load TS de loa					0.22 uV (typical)					
JAB03C 77 dB 77 dB 77 dB 77 dB 78 dB <			5% BER: 0	0.3 uV		5% BER:	0.3 uV			
TS 0.0 dB 0.0 dB <td>ntermodulation</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	ntermodulation									
digenet Channel Sheetvivy digenet Channel Sheetvivy digenet Channel Sheetvivy digenet Channel Sheetvivy digenet Channel Specific Channel Spec										
Ladag_ETSJ. T0 dB # 25 kHz T0 dB # 25 kHz T0 dB # 25 kHz Ad030 T0 dB 80 dB T0 dB 70 dB		60			60		60 dB			
pursue Rejection (AGOC 75 dB 80 dB 75 dB 90 dB TS 70 dB	, ,									
AAGGC 75 dB 80 dB 75 dB 70 dB <t< td=""><td></td><td></td><td>70 dB @ 2</td><td>5 kHz</td><td></td><td>70 dB @ 25 kHz</td><td></td></t<>			70 dB @ 2	5 kHz		70 dB @ 25 kHz				
TS 70 dB 70			-			-				
ated Audio 3 W Internal) 3 W (Internal) 3 W (Intern										
TS W (External - 4 ohms) 7.5 W (External - 4 ohms) 13 W (External - 4 ohms) using Distriction @ Rated Audio 3% (tryical) 3% (tryical) 3% (tryical) um and Noise -40 dB @ 12.5 kHz -40 dB @ 12.5 kHz -40 dB @ 12.5 kHz adio Response -41, 3 dB -41, 3 dB -41, 3 dB adio Response +1, 3 dB -47 dB M -47 dB M ammitter sequencies 40 dB 9.25 kHz 40 dB 9.25 kHz ammitter sequencies +1, 3 dB -17.5 W (External -4 ohms) ammitter ammitter ado 3.470 MHz 400-412 KHz 12.5 KHZ 12.5 KHZ 12.5 KHZ ado 3.470 MHz 40.540 W 12.5 KHZ ado 3.470 MHz 40.540 W 12.5 KHZ 2.5 KHZ 12.5 KHZ 12.5 KHZ ado 3.4 (5 KHz 12.5 KHZ 12.5 KHZ 1		/0			/0					
Image: Stand Audio Image:	ated Audio									
und on Baned Audio 3% trypcall 3% trypcall um and Noise 46 dB @ 12 5 kHz 46 dB @ 25 kHz 46 dB @ 25 kHz 46 dB @ 25 kHz 46 dB @ 25 kHz udio Response + 1, 4 dB + 1, 4 dB + 1, 3 dB onducted Spurous Emission - 37 dBm - 37 dBm respuencies 403-470 MHz 450-512 MHz 136-174 MHz 450-512 MHz 136-174 MHz ower Output - 37 dBm - 37 dBm - 37 dBm concert Span="2">concert Span="2" Concert Span="2">concert Span="2" Concert Span="2" concert Span="2" concert Span="2" concert Span="2" concert Span="2" concert Span="2" Concert Span="2" concert Span="2" concert Span="2" concert Span="2" <td <="" colspan="2" td=""><td></td><td></td><td colspan="3"></td><td colspan="3"></td></td>	<td></td> <td></td> <td colspan="3"></td> <td colspan="3"></td>									
un and Noise 40 dB @ 12.5 kHz 40 dB @ 12.5 kHz udio Response + 1, 3 dB - 45 dB @ 25 kHz onducted Spunious Emission - 57 dBm - 57 dBm resumences - 407 dBm - 57 dBm - 57 dBm resumences 403-470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz over Output - 77 dBm - 57 dBm - 57 dBm - 57 dBm - 57 dBm over Output - 407 dM /z 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz over Output - 25-40 W 1-25 W 1-40 W 125 W 25-40	udia Distortion @ Rotad Audia									
darb de go 2s kHz -45 dB @ 2s kHz -45 dB @ 2s kHz onducted Spunious Emission -57 dBm -57 dBm resummer -125 W 140 W 125 WHZ ip Power 125 WHZ/25 WHZ -125 WHZ 125 WHZ/25 WHZ spacing -57 dBm -125 WHZ -125 WHZ spacing +/-5 S ppm (XR M8260) +/-5 S ppm (XR M8220) -25 KHZ spacing +/-5 S ppm (XR M8260) +/-5 S ppm (XR M8220) -25 KHZ spacing +/-5 S KHZ +/-5 S KHZ +/-5 S KHZ foldulation -15 S KHZ -40 dB @ 125 KHZ -40 dB @ 125 KHZ										
udo Response + 1, 3 dB + 1, 3 dB onducted Spurious Emission -57 dBm -57 dBm transmitter -57 dBm -57 dBm transmitter -57 dBm -57 dBm requencies 403 470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz ower Output 0 25-40 W 1-25 W 1-40 W 125 W 1-40 W 125 W 25-40 W 1-25 W 25-40 W 25-40 W 25-45 W 25-40 W 25-45 W 25-40 W 25-45 W 25-40 W 12.5 kHz/2 St Hz 1-2.5 kHz/2 St Hz 1-2.5 kHz/2 St Hz 25-45 W	ium and ivoise									
onducted Spurious Emission -57 dBm -57 dBm ransmitter -57 dBm -57 dBm reseluencies 403 470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz ower Output 1.25 W 1.40 W 1.25 W 1.25 W 1.40 W 1.25 W 1.25 W 1.40 W 1.25 W 2.540 W 1.25 W 2.540 W 1.25 W 1.25 W 1.25 W 2.540 W 1.25 W 1.25 W 1.25 W 1.25 W 2.545 W 2.545 W 2.540 W 2.540 W 1.25 W 1.25 W 2.540 W 2.540 W 1.25 W 2.54 W 1.25 W 2.54 W 1.25 W 2.54 W 1.25 W 2.54 W	udio Besponse									
respective requencies 4403-470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 1-25 W										
requencies 403-470 MHz 450-512 MHz 136-174 MHz 403-470 MHz 450-512 MHz 136-174 MHz ower Output 1-25 W 1-40 W 1-25 W 1-40 W 25-40 W 1-25 W 1-40 W 25-40 W 25-41 W 25-41 W 25-40 W 25-40 W 25-40 W 25-41 W 25-40 W 25-41 W 25-40 W 25-			07 UD			57 di	511			
ower Output ow Power 1-25 W 1-40 W 1-25 W 1-25 W 1-40 W 1-25 W 1-25 W 1-40 W 1-25 W 25-40 W 25-45 W <th25 th="" w<=""></th25>	ransmitter									
ow Power 1.25 W 1.40 W 1.25 W 1.25 W 1.40 W 1.25 W 1.40 W 1.25 W 25.40 W 25.40 W 25.45 W 26.45 W 26.4	requencies	403-470 MHz	450-512 MHz	136-174 MHz	403-470 MHz	450-512 MHz	136-174 MHz			
igh Power 25-40 W 25-40 W 25-40 W 25-40 W 25-40 W 25-45 W hannel Spacing 12.5 kHz/25 kHz 14/-5.5 kHz/26 kHz 16/-2.5 kHz	ower Output									
hannel Spacing 12.5 kHz/25 kHz 12.5 kHz/25 kHz requency Stability +1.5 ppm (XR M8220) +/1.5 ppm (XR M8220) 30° C, 40° C, 42° C) +/0.5 ppm (XR M8220) +/0.5 ppm (XR M8220) Modulation Limiting +/2.5 kHz @ 12.5 kHz +/2.5 kHz @ 12.5 kHz Mum and Noise +/-5.0 kHz @ 52 kHz +/-5.0 kHz @ 25 kHz Mum and Noise -40.0 de @ 12.5 kHz -45.0 dB @ 25 kHz onducted / Radiated Emission -36 dBm < 1 GHz	ow Power	1-25 W	1-40 W	1-25 W	1-25 W	1-40 W	1-25 W			
requency Stability +/.1.5 ppm (XR M8260) +/.1.5 ppm (XR M8220) 30° C, +25° C) -/.0.5 ppm (XR M8260) +/.0.5 ppm (XR M8220) dodulation Limiting +/.2.5 kHz @ 12.5 kHz -/.4.5 kHz @ 12.5 kHz M Hum and Noise +/.2.5 kHz @ 12.5 kHz +/.2.5 kHz @ 12.5 kHz M Hum and Noise 4.0 dB @ 12.5 kHz 4.0 dB @ 12.5 kHz onducted / Radiated Emission 4.6 dB @ 25 kHz 4.6 dB @ 25 kHz onducted / Radiated Emission 3.0 dBm < 1 GHz	igh Power	25-40 W		25-45 W	25-40 W		25-45 W			
30° C, +60° C, +25° C) +/- 0.5 ppm (XiR M8228) +/- 0.5 ppm (XiR M8228) Iodulation Limiting +/- 2.5 kHz @ 12.5 kHz +/- 2.5 kHz @ 12.5 kHz M Hum and Noise -/- 40 dB @ 12.5 kHz -/- 40 dB @ 12.5 kHz M Hum and Noise -40 dB @ 12.5 kHz -/- 40 dB @ 12.5 kHz	hannel Spacing		12.5 kHz/ 2	25 kHz	12.5 kHz/ 25 kHz					
indulation Limiting +/-2.5 kHz @ 12.5 kHz +/-2.5 kHz @ 12.5 kHz M Hum and Noise -/-4.6 dB @ 12.5 kHz -/-4.6 dB @ 12.5 kHz M Hum and Noise 40 dB @ 12.5 kHz 40 dB @ 12.5 kHz and ucted / Radiated Emission 45 dB @ 25 kHz 46 dB @ 25 kHz onducted / Radiated Emission 30 dBm > 1 GHz 30 dBm > 1 GHz	equency Stability		+/- 1.5 ppm (Xi	R M8260)	+/- 1.5 ppm (XiR M8220)					
+/- 5.0 kHz @ 25 kHz +/- 5.0 kHz @ 25 kHz W Hum and Noise -40 dB @ 12.5 kHz -40 dB @ 12.5 kHz										
M Hum and Noise -40 dB @ 12.5 kHz -40 dB @ 12.5 kHz -45 dB @ 25 kHz -45 dB @ 25 kHz onducted / Radiated Emission -36 dBm < 1 GHz	Iodulation Limiting									
-45 dB @ 25 kHz -45 dB @ 25 kHz onducted / Radiated Emission -36 dBm < 1 GHz					· · · · · · · · · · · · · · · · · · ·					
onducted / Radiated Emission -36 dBm < 1 GHz	VI Hum and Noise									
-30 dBm > 1 GHz -30 dBm > 1 GHz djacent Channel Power -60 dB @ 12.5 kHz -60 dB @ 12.5 kHz -60 dB @ 2.5 kHz -70 dB @ 25 kHz -70 dB @ 25 kHz udio Response -1, 3 dB udio Distortion 3% V Modulation 12.5 kHz : 11K0F3E 25 kHz : 16K0F3E 25 kHz : 11K0F3E SK Digital Modulation 12.5 kHz Data Conly: 7K60FXD 12.5 kHz Data Conly: 7K60FXD 12.5 kHz Data Conly: 7K60FXD 12.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data Woice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 13.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 13.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 13.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 13.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 13.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 15.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 15.6 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 15.6 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 15.6 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE 15.7 kHz Data & Voice 7K60FX										
djacent Channel Power -60 d B @ 12.5 kHz -70 d B @ 25 kH	onducted / Radiated Emission									
-70 dB @ 25 kHz -70 dB @ 25 kHz udio Response +1, 3 dB udio Distortion 3% M Modulation 3% 12.5 kHz : 11 K0F3E 12.5 kHz : 11 K0F3E 25 kHz : 16K0F3E 2 kHz : 16K0F3E FSK Digital Modulation 12.5 kHz Data @ Voice: 7K60FXD 12.5 kHz Data @ Voice: 7K60FXE 12.5 kHz Data @ Voice: 7K60FXE igital Vocoder Type -0.0 MB E + 2 TM igital Vocoder Type AMBE + 2 TM igital Protocol ETSI-TS102 361-1 IFS Etsi-TS102 361-1 IFS -0.0° C / +60° C recurso specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength) Operating Temperature -30° C / +60° C IFF (Time To First Fix) Cold Start < 2 minutes										
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12.5 kHz Data & Voice: 7K60FXE 12.5 kHz Data & Voice: 7K60FXE igital Vocoder Type AMBE+2 TM AMBE+2 TM AMBE+2 TM igital Protocol ETSI-TS102 361-1 Environmental Specifications Ccuracy specs are for long-term tracking (95th percentile values > 5 satellites visible at a nominal -130 dBm signal strength) Operating Temperature -30° C / +60° C Storage Temperature -40° C / +85° C TFF (Time To First Fix) Hot Start > (10 meters) orizontal Accuracy	SK Digital Modulation									
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IFF (Time To First Fix) Cold Start < 2 minutes	PS				Environmental Specific	ations				
FF (Time To First Fix) Hot Start < 10 seconds Thermal Shock Per MIL-STD orizontal Accuracy < 10 meters	ccuracy specs are for long-term tracking	(95th percentile values > 5 sate	lites visible at a nominal -1	30 dBm signal strength)	Operating Temperature	-30° C /	+60° C			
orizontal Accuracy < 10 meters Humidity Per MIL-STD	TFF (Time To First Fix) Cold Start	< 2 minutes	< 2 minutes		Storage Temperature	-40° C /	+85° C			
				Thermal Shock	Per MIL	-STD				
ESD IEC-801-2KV	orizontal Accuracy	< 10 meters				Per MIL	-STD			
					ESD	IEC-801	-2KV			

Conforms to EC 1999/K/EC (R&TTE - Radio and Telecommunications Terminal Equipment) EN 300 066 EN 300 113

MOTOTRBO[™] **Repeater Radio**

General Specifications*							
	UHF VHF						
Channel Capacity		1					
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz				
Dimension (H x W x L)		132.6 x 482.6	x 296.5 mm				
	5.22 x 19 x 11.67 in						
Voltage requirements		100 - 240 VA					
Weight		14 kg (31 lbs)				
Current Drain			0.54 (0.40.) (4.0)				
Standby		1.0A (100 VAC),					
Transmit Operating Temperature Range		4.0A (100 VAC), -30°C to					
Max Duty Cycle		-30 C 10					
FCC Description	1-25 W : ABZ99FT4026	1-40W : ABZ99FT4027	1-25 W : ABZ99FT3026				
	25-40 W : ABZ99FT4025	1 4000	25-45 W : ABZ99FT3025				
	20101111220111020	1					
Receiver							
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz				
Channel Spacing		12.5 kHz	/ 25 kHz				
Frequency Stability							
(-30° C, +60° C, +25° C)	+/- 0.5 ppm						
Analog Sensitivity	0.3 uV (12 dB SINAD)						
	0.4 uV (20 dB SINAD)						
	0.22 uV (typical)						
Digital Sensitivity	5% BER: 0.3 uV						
Intermodulation							
TIA603C	75 dB						
ETS	70 dB						
Adjacent Channel Selectivity	60 dB @ 12.5 kHz						
Spurious Rejection	70 dB @ 25 kHz						
TIA603C	75 dB		80 dB				
ETS	70 dB		70 dB				
Audio Distortion @ Rated Audio	3% (typical)						
Hum and Noise	-40 dB @ 12.5 kHz						
	-45 dB @ 25 kHz						
Audio Response	+ 1, -3 dB						
Conducted Spurious Emission	-57 dBm						
Transmitter							
Frequencies	403-470 MHz	450-512 MHz	136-174 MHz				
Channel Spacing		12.5 kHz	/ 25 kHz				
Frequency Stability							
(-30° C, +60° C, +25° C)		+/- 0.5	ppm				
Power Output	1-25 W	1.40.14/	1.05.\//				
Low Power High Power		1-40 W	1-25 W				
5	25-40 W	1/25kHz	25-45 W				
Modulation Limiting	+/- 2.5 kHz @ 12.5 kHz +/- 5.0 kHz @ 25 kHz						
FM Hum and Noise	-40 dB @ 12.5 kHz						
	-45 dB @ 25 kHz						
Conducted / Radiated Emission		-36 dBm < 1 GHz					
		-30 dBm > 1 GHz					
Adjacent Channel Power		-60 dB @					
		-70 dB @ 25 kHz					
Audio Response	+1, -3 dB						
Audio Distortion	3%						
FM Modulation		12.5 kHz :	11K0F3E				
	25 kHz: 16K0F3E						
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD						
	12.5 kHz Data & Voice: 7K60FXE						
Digital Vocoder Type	AMBE+2™ ETSI-TS102 361-1						
Digital Protocol							

*Specifications subject to change without notice. All specifications shown are typical.Radio meets applicable regulatory requirements.

Conforms to EC 1999/5/EC (R&TTE - Radio and Telecommunications Terminal Equipment) EN 300 080 EN 300 113



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