

MOTOTRBO™ DGR™ 6175 Repeater



Shift into Digital.

The next-generation professional two-way radio communications solution is here, with more performance, productivity and value—thanks to digital technology that delivers increased capacity and spectrum efficiency, integrated data communications and enhanced voice communications.

MOTOTRBO offers you a private, standards-based, cost-effective solution that can be tailored to meet your unique coverage and feature needs.

This versatile portfolio provides a complete system of portable radios, mobile radios, repeaters, accessories and data applications—a complete solution.

Key Features

Supports two simultaneous voice or data paths in digital Time-Division Multiple-Access (TDMA) mode.

Doubles the number of users you can have on a single licensed 12.5 kHz channel.

Integrates voice and data to increase operational efficiency.

100% continuous full duty cycle up to 45W VHF and 40W UHF.

Integrated power supply.

LEDs clearly indicate transmit and receive modes in both channel slots as well as operation in digital or analog modes.

Rack-mount is standard; wall-mount kit also available.

Sturdy handles make installation and handling easier.

Automated battery back-up available (battery sold separately).

Supports applications including MOTOTRBO Text Messaging Services and MOTOTRBO Location Services (GPS location tracking).

MOTOTRBO is a complete two-way radio system that includes portable and mobile radios, repeaters, accessories and applications.

GENERAL	VHF	UHF		
		BAND I	BAND II	
Channel Capacity		1		
Typical RF Output	1-25 W	1-25 W	1-40 W	
	25-45 W	25-40 W	(1-25 W above 512 MHz)	
Frequency	136-174 MHz	403-470 MHz	450-527 MHz	
Dimensions (HxWxL)	5.22 x 19 x 11.67 in			
	(132.6 x 482.6 x 296.5 mm)			
Weight	31 lbs. (14 kg)			
Current Drain: Standby	1 A (1 A DC typical)			
Transmit	3.8 A (11 A DC typical)			
Operating Temperature Range	-30	-30°C to +60°C		
Max Duty Cycle	100%			
FCC Description	ABZ99FT3026	AB	Z99FT4026	
	ABZ99FT3025	AB	Z99FT4025	

RECEIVER	VHF		UHF	
		BAND I	BAND II	
Frequencies	136-174 MHz	403-470 MHz	450-527 MHz	
Channel Spacing	12.5 kHz / 25 kHz			
Frequency Stability	+/- 0.5 ppm			
(-30° C, +60° C, +25° C)				
Analog Sensitivity (12dB SINAD)	0.3 uV			
	0.3	22 uV (typical)		
Digital Sensitivity	5% BER: 0.3 uV			
Intermodulation (TIA603C)	78 dB	• • • • • • • • • • • • • • • • • • • •	75 dB	
Adjacent Channel Selectivity	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	
TIA603	65 dB @ 12.5 kHz, 75 dB @ 25 kHz			
TIA603C	50 dB @ 12.5 kHz, 75 dB @ 25 kHz			
Spurious Rejection (TIA603C)	80 dB	• • • • • • • • • • • • • • • • • • • •	75 dB	
Audio Distortion @ Rated Audio	3% (typical)			
Hum and Noise	-40 dB @ 12.5 kHz			
	-45	5 dB @ 25 kHz		
Audio Response	TIA603C			
Conducted Spurious Emission	-57 dBm			
	•••••	•••••	•••••	

TRANSMITTER	VHF		UHF	
		BAND I	BAND II	
Frequencies	136 - 174 MHz	403-470 MHz	450-527 MHz	
Channel Spacing	12.5 kHz / 25 kHz			
Frequency Stability	+/- 0.5 ppm			
(-30° C, +60° C, +25° C)				
Power Output	1-25 W	1-25 W	1-40 VV	
	25-45 W	25-40 W	(1-25 W above 512 MHz)	
Modulation Limiting	+/- 2.5	+/- 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 (TIA603C)	60 dB @ 12.5 kHz			
	70 dB @ 25 kHz			
Audio Response	TIA603C			
Audio Distortion	3%			
FM Modulation	12.5 kHz: 11K0F3E			
	25	kHz: 16K0FE		
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD			
	12.5 kHz D	ata & Voice: 7K60FXE		
Digital Vocoder Type	AMBE++			
Digital Protocol	ETSI-TS102 361-1			

Quality / Reliability



