SD-670D Series

DMR - RF Data Modem

SD-671D V2 VHF RF Data Modem (150-174 MHz)
SD-674D U2 UHF RF Data Modem (410-470 MHz)

DMR
DIGITAL MOBILE RADIO ASSOCIATION

- Power Output Programmable Per Channel: 10/5/1W for VHF, 5/1W for UHF
- DMR Tier II TDMA/Analog
- 32 Channels (Dip Switch)
- 9V to 24V DC Operation
- RF Communication Data Speed 9600bps (OTA)
- Digital Voice uses AMBE+2 Voice Codec
- DE-15 Pin Female Connector, TTL Serial
- Built-In AT Commands
- AES 256-Bit Encryption (AES-CTR)

Applications

Water/Waste Treatment Plants
Oil and Gas Field SCADA
Security/Alarm Systems
Siren Control
Gate Systems
Sign Control
Weather Monitoring
Irrigation Systems
Voice/Emergency Call Boxes
Remote Controls & Switches

Maxon's SD-670D Series of Radio-Frequency data modems are rugged, reliable, and designed for a variety of RF applications in either Digital or Analog mode like SCADA, Call boxes, Weather stations, Water pumps, Remote Controls, and can even be used together with another SD-670D to make a Low Power Repeater. AES-256-Bit Encryption for NSA-Level security on both voice and data communication; Encryption feature is compatible with other Maxon radios that have AES Encryption.

SD-670s incorporate Maxon's popular mechanical footprint and a BNC antenna connection. Its die-cast aluminum housing shields the radio from RF interference and gives exceptional durability in the most extreme environments. Transmit power settings between 1W, 5W, and 10W* *(*VHF only)* provide the power needed for any job and the LED indicator gives an instant, on-sight status of the radio's operation. Reduce the operating power needed for this device with the Power Save* feature in SD-670's programming software.

The SD-670 is durable, secure, and versatile. It is the ideal radio for the harshest of system demands.

Whether implementing a new system or installing into an existing system, the Maxon family of data telemetry radios has been the choice of OEM and end-users worldwide for over 35 years.

FC IC CE

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SPECIFICATIONS

GENERAL

SD-671D V2	150-174 MHz
SD-674D U2	410-470 MHz
Channels	32 (Dip Switch)/AT Commands
Power Requirement	9V-24V DC, 12V nominal
Current Drain (Digital & Analog)	D: Tx Hi: 1, Tx Lo: 0.6A, Stdy 115mA* A: Tx Hi: 1.6, Tx Lo: 1A, Stdy 115mA*
Channel Spacing	25/20/12.5 kHz (Analog) 12.5 kHz (Digital) 2 Time Slots of 6.25 Each
Dimensions (L/W/H)	4.77 x 2.44 x .96" (110x55x25 mm)
Weight	9.9 oz. (280 g.)
LED Status	Green = Rx, Red = Tx

TRANSMITTER

Output Power	10/5/1W for VHF, 5/1W for UHF
FM Modulation	11K0F3E (12.5 kHz), 14K0F3E (20 kHz), 16K0F3E (25 kHz)
4FSK Digital Modulation	12.5 kHz Data Only: 7K60FXD, 12.5 kHz Data & Voice: 7K60FXE
FM Hum and Noise	>40dB (12.5 kHz), >45dB (25 kHz)
Spurious Emissions	-36dBm
TX Attack Time	<5ms
Adj. Channel Power	-70dB (25 kHz), -65dB (12.5 kHz)
Audio Response	300Hz - 3 kHz +1, -3dB (25 kHz)
	300Hz - 2.55 kHz +1, -3dB (12.5 kHz)
Digital Vocoder Type	AMBE3000 Vocoder Chip with AMBE+2 Voice Compression Algorithm
Digital Protocol	ETSI-TS102 361-1-2-3

RECEIVER

Sensitivity (Analog)	0.25µV @ 12dB SINAD
Sensitivity (Digital)	0.22µ V/BER 5%
Selectivity TIA-603 ETSI	>65dB (12.5 kHz), 70dB (20/25 kHz)
Intermodulation TIA-603 ETSI	>70dB (12.5/20/25 kHz)
RX Hum/Noise	<5%
Spurious/Rejection	>70dB
Lock Time	<5ms
Audio Output Power	0.5 Watt @ 8 ohms

PACKAGE INCLUDES:
Radio Only.

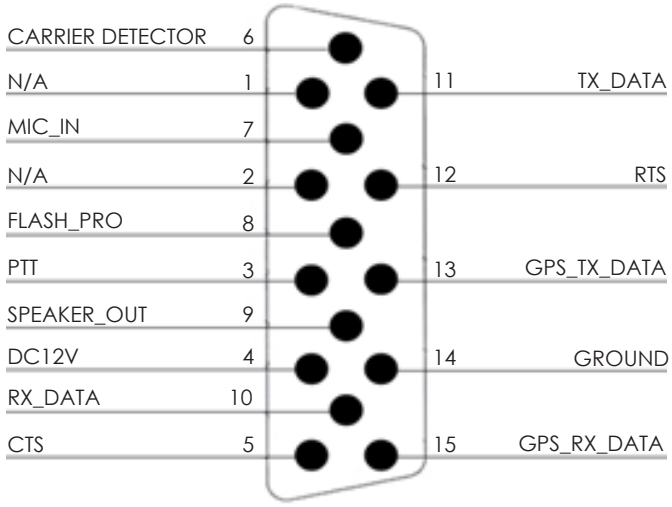
Specifications are subject to change without notice.

ACCESSORIES

ACCESSORY OPTIONS

BNC 6" Antenna VHF/UHF
Magnetic Mount w/Wave Antennas
PC Programming Software and Cable (USB)
Aluminum Pin Style Heat Sink

DE-15 PIN CONNECTOR



ENVIRONMENTAL

Operating Temperature	-22° to 140° F (-30° to 60° C)
TX Duty Cycle	50% @ Temp Range Listed

Approvals	FCC	Industry Canada
SD-671D V2	VSOMD-100D	184A-MD-100D
SD-674D U2	VSOMD-400D	184A-MD-400D

NOTE: Some features indicated by specifications listed are prohibited by FCC rule and are not available on models sold in the U.S. or its territories.

RoHS 2002/95/EC

Manufactured to ISO-9002:2000 quality standard.

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