

SD-170EL Series

Data Telemetry Radio

SD-171EL 5/1W VHF (146-174 MHz) SD-174EL 5/1W UHF (450-490 MHz)



- 5/1 Watt
- LED Status Indicator
- 16 Channels (Dip Switch Select)
- Modem Options* (GMSK/FFSK)
- CTCSS/DCS Encode/Decode
- DE-15 Pin Female Connector
- TX Time Out Timer
- 12.5/25 kHz Channel Spacing
- Carrier Detect
- Busy Channel Lockout
- 2-Tone Decode

*ACC-513E GMSK 9600 Baud ACC-514E FFSK 4800 Baud

Applications

Water/Waste Treatment Plants
Oil and Gas Field SCADA
Security/Alarm Systems
Gate Systems
Remote Controls
Commercial Sign Controls
Automatic Vehicle Location
Murphy/Kill Switches
Weather Monitoring
Irrigation Systems
Emergency Call Boxes
Low Power Repeaters



The Maxon SD-170EL Series of radios are durable, reliable and designed to meet the needs for a variety of wireless applications. Include the optional FFSK or GMSK modem boards to add even more diversity to this cost effective radio.

The modules incorporate the most requested mechanical footprint and BNC antenna connection. Adjustable transmit power settings from one to five watts provides the power needed on any job and the tri-color LED indicator gives instant on-sight status of the radios operation. Combine that with low current drain and fast transmitter/receiver attack times for operation in the harshest of system demands. The die cast aluminum cabinet/lid provides resistance to RF interference; and gives exceptional environmental durability in the most extreme conditions.

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









SPECIFICATIONS

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GENERAL		
SD-171EL	146-174 MHz	
SD-174EL	450-490 MHz	
Channel Spacing	12.5/25 kHz	
PLL Channel Step	5, 6.25 kHz	
Power Requirement	9-18 V DC, 12V nominal	
Current Drain	Tx Hi: 2.0, Tx Lo: 1A, Stdy 65mA	
Operating Temperature	-22° to 140° F (-30° to 60° C)	
Dimensions (L/W/H)	4.6 x 2.4 x 1.4" (117x62x35 mm)	
Weight	9.4 oz. (267 g.)	
Lock Time	<10ms	
LED Status	Green - Receive/Decode	
	Red - Transmit Yellow - Busy	
TX Duty Cycle	35% @ Temp Range Listed	
TRANSMITTER		
Output Power	5/1 Watt Programmable	
FM Hum and Noise	40dB (12.5 kHz), 40dB (25 kHz)	
Modulation Sensitivity	100mV RMS (60% peak dev)	
Spurious Emissions	-36dBm	
Frequency Deviation	±2.5, Min. ±1.9 kHz (12.5 kHz)	
	±5.0, Min. ±3.8 kHz (25 kHz)	
Adj. Channel Power	70dB (25 kHz), 60dB (12.5 kHz)	
Audio Response	+1, -3dB from 6dB per octave pre-emphasis and characteristic 300 \sim 3000 Hz	
RECEIVER		
Sensitivity	.30µV (12.5 kHz), 0.28µV (25 kHz)	
Selectivity	65dB (12.5 kHz), 70dB (25 kHz)	
Intermodulation	-70dB	
Spurious Emissions	-57dB (9kHz-1GHz),-47dB (1GHz-4GHz)	
RX Hum/Noise	-40dB (12.5 kHz), 40dB (25 kHz)	
Spurious/Harmonic	65dB	
Response Time	<16ms	
Squelch Attack Time	<20/40 ms (RSSI/Analog) <10/30ms (RSSI/Analog), ±20dB	
Squelch Decay Time	5 ms Min., 20 ms Max	
Audio Output Power	0.5 Watt	

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.

Specifications are subject to change without notice.

ACCESSORIES



ACCESSORY OPTIONS

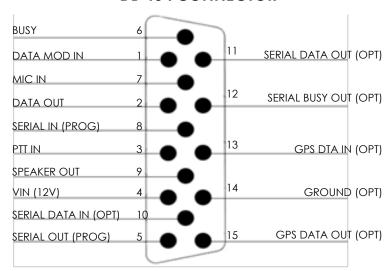
BNC 6" Antenna VHF/UHF ACC-514E FFSK (4800 25 kHz, 2400 12.5 kHz) Baud Modem ACC-513E GMSK (9600 25 kHz, 4800 12.5 kHz) Baud Modem

PC Programming Software and Cable (USB) **Extender Board for Service and Alignment** Magnetic Mount w/Wave Antennas Heat Sink

PACKAGE INCLUDES:

Radio Only

DB-15 PCONNECTOR



Approvals	FCC	Industry Canada
SD-171EL	RXUSD-171E	153B-SD-171E
SD-174EL	RXUSD-174E	153B-SD-174E







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Manufactured to ISO-9002:2000 quality standard.



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