

Specifications

Switching Bandwidth	The user can select any 6.25kHz raster frequencies with the easy-to use inbuilt menu or Windows configuration software.
Data Reliability	User selectable Automatic Repeat Request (ARQ) offers a high level of data reliability. The immediate re-transmission of data ensures that the user will not encounter end-to-end errors or data losses, even in hostile environments.
Diagnostics at a Glance	The front panel LEDs display diagnostic information indication such as Receive Signal Strength (RSSI), transmit power, radio temperature and RS232 port status.
Data Mode Options	With data, packet, frame and audio-driven modes available, the Crescendo supports point-to-point, connection based and broadcast modes of communication.
Easy Network Management	The user is able to view diagnostics and change the settings of remote radios within a network from a single point.
Data Integrity	Over the air data is encapsulated with Forward Error Correction, data interleaving and Cyclic Redundancy Checksums (CRC) for high level data protection.
Easy Network Configuration	The Cruise Control software allows the user to configure, save and upload radio configuration settings. This allows for more efficient configuration of multiple radio modems.

PHYSICAL

Dimensions: 160mm x 105mm x 48mm
Weight: 700g
Construction: Powder coated aluminium

MODEM

Serial Data: RS-232 Asynchronous with handshaking
Interface Speed: 1200bps to 115200bps software selectable
Error Rate:
 -104 dBm for less than 1×10^{-6} BER (9600bps)
 -106 dBm for less than 1×10^{-6} BER (19200bps)

GENERAL

Operating Voltage: 9V to 30V DC (negative ground)
Operating Current:
 - Transmit @12V 1.7A nominal @ 5W
 - Receive @12V 150mA nominal
Operating Temp: -20 to +70°C
Operating Humidity: Up to 95% non-condensing relative humidity

CONNECTORS

Antenna: BNC Female (50 Ohm),
Ethernet port: RJ45 (Straight through)
Serial: 2 x DCE DE9 RS-232
 -Interface Board CREP129A to adapt to RFI-590
Power: Phoenix PH1176508 (mating connector supplied)

RADIO

Frequency Range: 390 MHz to 500 MHz software programmable within 20 MHz band
Air Data Rate: 19.2 kbps (25 kHz channel), 9.6 kbps (12.5 kHz channel)
Duty Cycle: 100%
Channel Bandwidth: 12.5kHz or 25kHz (model specific)
Compliance: Designed to ACA, AS-4295, FCC, Industry Canada, ETSI (planned)
Modulation: Nyquist-shaped 4-level FSK
Tx key up Time: less than 1mS
Data Turn-around Time: <10mS
Transmit Power: 1mW (0dBm) to 5W (+37dBm)

AUDIO INTERFACE

Audio: 300-3000 MHz
Input: 0.8 Vpp
Output: 0.8 Vpp

OPTIONS

RFI-450 VF HWHE: Ethernet Enabled Crescendo VF UHF, Half Duplex, Wide Band, 19200bps
RFI-450 VF HNME: Ethernet Enabled Crescendo VF UHF, Half Duplex, Narrow Band, 9600bps

Specifications subject to change without notice V171013

