

TELEMETRY

CBR-610 Receiver



The CBR-610 receiver is a pit-based L-Band receiver for telemetry data for use with the CBT-610 transmitter.

The CBR-610 is designed to plug into a sub-rack, which also contains the required power supplies. Up to three CBR-610 receivers can be plugged into a sub-rack at the same time, allowing simultaneous reception from up to three CBT-610s. The CBR-610 can be connected directly to an antenna to receive CBT-610 RF data. Alternatively, the CBR-610s can be used with a splitter module (ordercode O 030 052 006 000) to allow the signals from up to two antennas to be combined and split between the receivers in the sub-rack, thus avoiding the need for dedicated antennas per receiver.

Each receiver has a dedicated 100Mbps Ethernet interface for direct TCP/IP connection to a network or PC.

The unit provides a supply to an external mast-head Low Noise Amplifier (LNA).

Electrical

- Supply Voltages 24V, $\pm 12V$, 5V with transient protection on all supplies
- Supply Current (typical operating current)
 - 40mA @ 24V (up to 200mA if an LNA is used)
 - 200mA @ 12V
 - 150mA @ -12V
 - 2.8A @ 5V
- Front panel LEDs to indicate Ethernet status, RF carrier detection and synchronisation and LNA power routing.

For programming information please contact our technical consultancy service

Communications

- 1 100BaseT full-duplex Ethernet link
- 2 RS232 serial links, up to 57.6kbps

Connection Definition

- 96-way DIN41612 connector

For pin numbers please consult our Technical Consultancy Department

Electro Magnetic Compatibility

- Complies with the essential protection requirements of 89/336/EEC

Application

- High data rate continuous telemetry receiver, decoding 1.85MHz RF bandwidth OFDM signals from CBT-610 (using 74 carriers, 25kHz apart).
- Frequency range 1450–1650 MHz (L-Band), tuneable in 2 MHz steps.
- High-speed DSP performs automatic frequency control and automatic gain control for optimum signal processing, signal correlation, decoding of QPSK, 8PSK or 16PSK data, performs error correction through Turbo Product Code decoding, and also performs data de-scrambling and CRC computation.
- 48MByte Memory board for data buffering for improved Ethernet network usage.

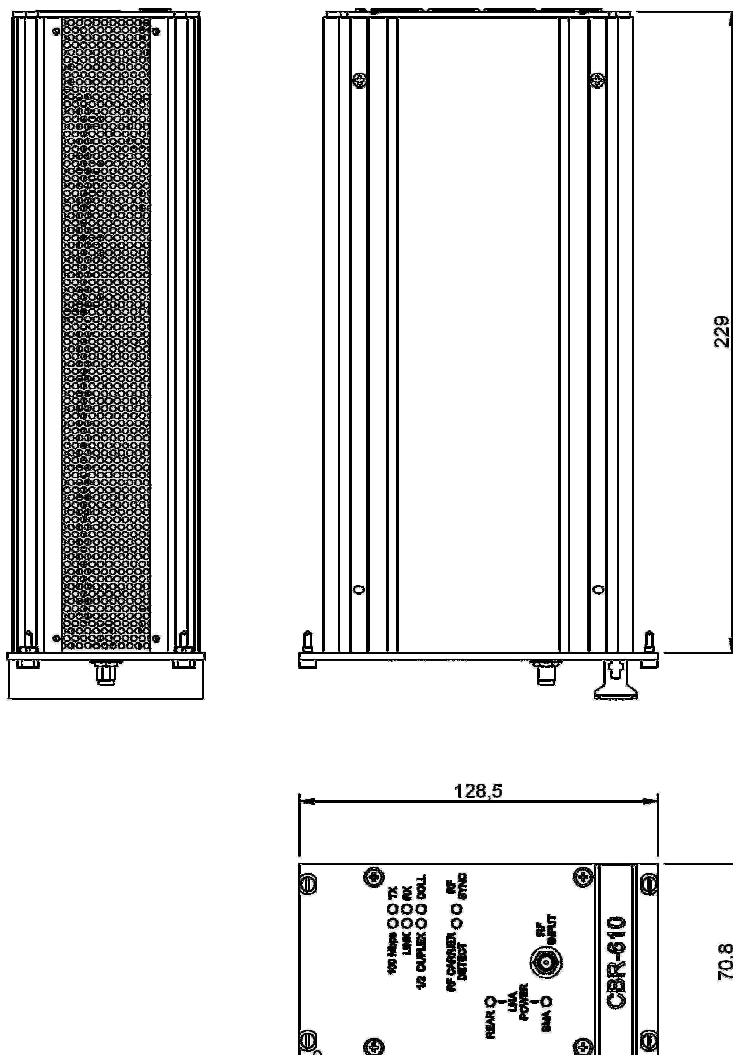
Mechanical

- Rack mounted unit, 3U height, 14HP wide
- Weight approximately 1kg

Environmental

- The unit is not sealed and must be protected against moisture
- Operating Temperature 0 to 40°C
- Forced air cooling is required
- Storage Temperature -10 to 70°C
- The unit is not suitable for mounting in a vehicle

16/11/05



Description	Order Code
CBR-610	Q 030 052 010 000