

Robust CRx

COFDM – Video, Audio Telemetry and IP Products

COBHAM

September 2011 Data Sheet

The most important thing we build is trust



The Cobham Robust CRx is a highly flexible solution for use in permanent or temporary installed receiver applications. The Robust CRx combines four Cobham SOLO Receivers supplied in robust enclosure to provide up to four video streams in harsh environments.

Designed to work with external Cobham down-converters and providing quad diversity, the Cobham Robust CRx enables military and law enforcement organisations to quickly deploy overt and covert video surveillance, ensuring video is recovered free from distortions typically associated with fading and multipath.

Making use of its Ethernet connectivity, the Robust CRx can be deployed with a controller PC running the comprehensive controller application as a temporary stand-alone system or across a more permanent local-area network. The great advantage is that it can be deployed outside for long periods with no detriment to performance.

The Cobham Surveillance narrow bandwidth modulation offers unprecedented spectrum efficiency, while also increasing the system sensitivity and, therefore, range. The Robust CRx has comprehensive On Screen Display diagnostic capability to show link quality and spectrum. Security of transmission is ensured by the use of optional AES128/256 bit encryption algorithms.

Features:

- Quad COFDM diversity
- Fully MPEG2 compliant including 4:2:2
- DVB-T compliant 8/7/6MHz
- Maximum ratio combining antenna diversity for fade and multipath elimination
- Narrow Band 2.5 and 1.25MHz compliant
- IP control and streaming video
- Comprehensive on-screen display (OSD) diagnostics for link analysis, including spectrum analyser
- External down-converters for convenient antenna placement
- Internal AES128/256 bit encryption (option)
- Very low delay video operation for real time applications.

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Specification:

Input

RF Input 4x N-Type
Power MIL38999 Series 3

Output

4 x Composite Video MIL38999 Series 3
4 x Stereo Line Level Audio MIL38999 Series 3
2 * RS232 Data MIL38999 Series 3

RF

Frequency Bands 70 to 850MHz
With additional Down-Converter 5.62 to 5.9GHz,
4.5 to 5GHz with DCB 450500,
2.20 to 2.55GHz,
2 to 2.5GHz with DCB200250
Tuning Steps 250KHz

Modulation

DVB-T Bandwidth 8/7/6MHz
DVB-T Guard 1/32, 1/16, 1/8, 1/4
DVB-T FEC 1/2, 2/3, 3/4, 5/6
DVB-T Modulation QPSK, 16QAM, 64QAM
Sensitivity -95dB plus

Video

Line Standard PAL/NTSC
Outputs Composite (4)
Resolution 704, 528, 480, 352
Coding Mode MPEG 4:2:2 or 4:2:0
Delay 80ms

Audio

Analogue Output 2 Stereo Pairs +18dBm (on 600 ohm)
AES/EBU 2 Stereo Balanced Pairs (110 ohm)
Sample Rate 48KHz
Format MPEG Audio 384Kb/s to 64Kb/s
Mono or Stereo

Data Interface

RS232 Data Output 1K2 to 115K2 baud switchable

Control

Remote Control PC GUI Application over Ethernet
On Screen Display Spectrum, RX SNR, RX Power

Ethernet

Mode 10/100/1G Ethernet Port
Function Remote Control
MPEG-2 UDP Multicast

Physical

Dimension Base Unit W 240mm, D 180mm, H 375mm
Weight Base Unit 14Kg

Power

DC Input 9 to 36V Reverse Polarity Protected
Power Consumption 60W

Environment

Temperature Range -32 to +44 deg C (Operational)
-33 to +60 deg C (Storage)

Sealing (EN60529) IP67

MIL-STD-810G Conformity 500.5 Low Pressure (Altitude)
501.5 High Temp Storage (A2)
501.5 High Temp Operational (A2)
502.5 Low Temp Storage (C1)
502.5 Low Temp Operational (C1)
503.5 Temperature Shock
507.5 Humidity
509.5 Salt Fog
514.5 Vibration Category 4
516.6 Shock Test (Procedure I)
521.2 Icing/Freezing Rain

MIL-STD-810F Conformity 508.5 Fungus (European Set)

EMC

DEF STAN 59-411:2008 part 3 Iss 1, EMI Land use – Limit Class A
EN55024:1998 inc A1 & A2
FCC Part 15 (Digital Device)

Safety

EN60950 LVD

Product Code:

SOLCRXR444 Robust Central Receiver Quad diversity.

Product Code Includes

1 x Power Cable
1 x Umbilical Control Cable

Accessory Options

None

Licensing Options

RX-N Narrowband 2.5MHz
RX-UN Upgrade to Ultra-Narrowband 1.25MHz
RX-UXN License RX Upgrade from RX-UN to MPEG4 Ultra-X
Narrowband 625kHz

For further information please contact:

Cobham Tactical Communications and Surveillance

The Cobham Centre – Solent, Fusion 2
1100 Parkway
Solent Business Park
Whiteley
Hampshire, PO15 7AB
England

T: +44 (0)1489 566 750
F: +44 (0)1489 880 538
css.sales@cobham.com

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