Domo - Video, IP and Sensors

PRORXD - 2RU Professional Receiver Dual Decoder COFDM - Video, Audio Telemetry and IP Products

April 2016 Data Sheet





The PRORXD-2RU is a feature-rich COFDM r eceiver/decoder with DUAL receive and HD decoding capability in a single enclosure. Designed specifically for the demanding broadcast market, it is supplied in a 1/2 19" 2RU high rack chassis, where two units can be mounted together to occupy a 19" slot and uses standard broadcast connectors for signal interfaces.

It is available with 6-way or 8-way maximum ratio combining RF inputs, ensuring video is recovered free from the distortions typically associated with fading and multipath. All DVB-T 6/7/8MHz modes are supported, plus DTC's 6/7/8MHz UMVL (Ultra Mobile Video Link) modulation — designed to enhance performance when utilising higher frequency bands or in high-speed TX applications such as Motorsport. DTC Narrowband, enabling broadcast quality (4.8Mbps) signals to be transmitted in only 2.5MHz bandwidth is available as an option. Designed to work with external DTC down- converters, the receiver can be located up to 100m from the antennas using standard 75Ω co-axial cables.

The unit incorporates an extremely flexible decoding platform, with low-delay SD and HD MPEG2 and H.264 decoding ensuring compatibility with all DTC and most 3rd party encoders. An optional 2nd decoder can be enabled, allowing 2x SD or HD signals to be decoded. Multiple video output formats are offered with composite and SDI outputs in SD mode and HD-SDI and in HD mode. SDI/HD-SDI both feature embedded audio and HDMI outputs are provided for use with domestic TV's. ASI in/out is offered as an option.

A full Genlock facility is available in both SD and HD modes. When in HD mode, an optional downconverted SD composite video monitoring output is also offered.

The unit can also be used as an IP decoder. When paired with a DTC IP Encoder, the unit can send an IFB signal to the remote location via the reverse leg of the IP link. An optional adaptive bit-rate encoding/decoding mode is also available, allowing fully automated operation on variable capacity or contended networks such as VSAT or BGAN terminals.

The PRORXD-2RU can be controlled through its comprehensive, full-colour front panel touch- screen display, as well as on its RS232 or IP Ethernet browser control interfaces.

A comprehensive On Screen Graphical display is available for monitoring and diagnostics, which can be enabled or disabled separately on the two video outputs.

Features:

- DVB-T & UMVL demodulation
- 2, 4, 6 or 8 RF inputs with 9/12DC switchable down converter powering
- Fully compliant MPEG2 and H.264 SD/HD decoding
- HD-SDI/SDI with embedded audio out
- Composite video outputs (with optional HD downconversion)
- HDMI outputs
- IFB input (IP mode)
- 2nd decoder option
- Auto bit-rate capability (with DTC Broadcast IP Encoder)
- ASI input and output
- Front panel control (+ Web-browser and RS232)
- Genlock input
- Comprehensive on-screen display (OSD) diagnostics
- Ultra low delay video operation for real time applications
- 2RU half-rack mounting
- 12VDC powering (AC adaptor supplied)

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Specification:

Inputs Power

XLR4(m) 8 x BNC (50-850MHz)

IP Streaming/Control RJ45

ASI In 2 x BNC 2 x XLR3F Genlock BNC RS232 Control 9-pin D-type

Output

CBVS/SDI/HD-SDI//ASI 2 x BNC ASI Out 1 x BNC 2 x Type A HDMI HDMI

IP Streaming/Control RJ45 Stereo Audio

4 x XLR3M + 2 x Lemo 0B 5-way RS232 Data 2 x 9-pin D-type Audio headphone monitor 3.4mm stereo jack

Ethernet

Mode 2 x 10/100/1G Ethernet Ports **Function** Remote Control via web-browser

Video (dual decoding option)

PAL/NTSC Line Standard (SD)

Resolution (HD)

720p50, 720p59, 720p60, 1080i50, 1080i59, 1080i60, 1080p23, 1080p24, 1080p25, 1080p29, 1080p30, 1080psf23, 1080psf24, 1080psf25, 1080psf29, 1080psf30, 1080p50, 1080p60

Decoding Mode H.264 SD/HD 4:2:0/4:2:2

MPEG2 SD/HD 4:2:0/4:2:2

H.263 SD

Delay From 15ms end-to-end (mode

dependant)

Audio

Analogue Output 4 Stereo Pairs +18dBm (on 600 ohm) 4 Stereo Balanced Pairs (110 ohm) AFS/FRII

Sample Rate 48KH₇

MPEG Audio 384Kb/s to 64Kb/s Mono or Stereo Format

ΙP MPEG-2 UDP/RTP/RTSP

ASI

Byte or packet mode Mode

Data Interfaces

1K2 to 115K2 baud switchable RS232 Data Output

Control

Remote Control Network Web Browser control interface

RS232 Control from PC GUI

Application

Local Control Front Panel touch-screen display

Preset Loading Front panel USB

On Screen Display Spectrum, RX SNR, RX Power **Physical**

Dimension W 220mm, D 320 mm, H 88mm

Weight **TBC**

Power

6 to 26V Reverse Polarity Protected DC Input Power Consumption 27-49W (down converter dependant)

Environment

-10°C to +50°C Temperature Range

Product Codes:

Please see configurator table on the following page.

Products are available to security users in licensed frequency bands. Encryption licences are subject to export control. These products are not approved for use by unlicensed users. Commercial products are available if used in appropriate licensed frequency bands.

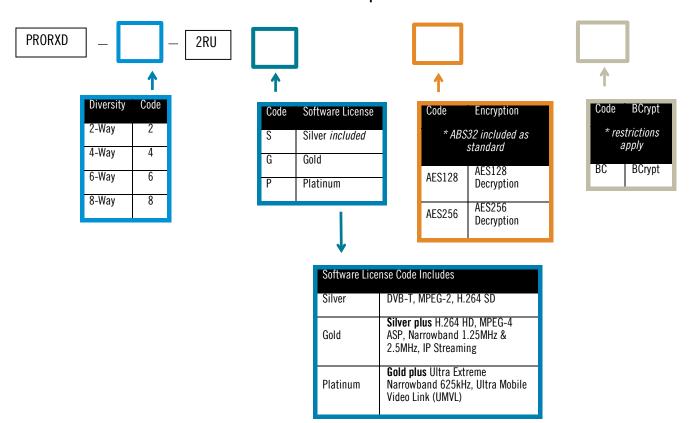
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DTC SALES CODE

Please enter required codes



| Product Code Includes | |
|-----------------------|--|
| PRORXD | 2RU Receiver |
| CA0512 | External XLR Audio Cable Assembly 2M |
| CA0649 | External 12V 6.67A 80W Desktop Power Supply Unit Assembly |

| Compatible Products (sold separately) | |
|---------------------------------------|---------------------|
| SOL4DCAM | DropCam Transmitter |
| SOL4MTX | Transmitter |
| SOL5TX | Transmitter |
| SOL7NTX | Transmitter |
| SOL7HDNTX | Transmitter |
| SOLH264TX | Transmitter |

| Related Accessories (sold separately) | |
|---------------------------------------|---|
| PRORXDSRFP-2RU | Single Rack Front Panel Extender 2RU |
| PRORXCPLKT-2RU | PRORXD-2RU Coupling Kit |
| PRORXD-DEC2 | Enable 2nd HD decoder on ProRXD receiver/IP Decoder |
| DCB/DCBGS | Various frequency codes available, please consult RF section of the datasheet |
| Antennas | Various frequencies available |
| CABRF | RF Cable |
| PRORXD-UP | 2-way Diversity Upgrade |

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