

PRORXD - 1RU

Professional Receiver Dual Decoder

COFDM – Video, Audio Telemetry and IP Products

April 2016 Data Sheet

DTC



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

The PRORXD-1RU is available with 2-way or 4-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 Broadcast 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-1RU can be controlled through its OLED front panel 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 (optional) demodulation
- 2 or 4 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 down-conversion)
- 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
- 1RU half-rack mounting
- 12VDC powering (AC adaptor supplied)

PRORXD - 1RU
Professional Receiver Dual Decoder
 COFDM – Video, Audio Telemetry and IP Products



April 2016 Data Sheet

Specification:

Inputs

Power	XLR4(m)
RF	4 x BNC (50-850MHz)
IP Streaming/Control	RJ45
ASI In	BNC
IFB	5-pin 0B Lemo
Genlock	BNC
RS232 Control	9-pin D-type

Output

2x CBVS/SDI/HD-SDI Video	BNC
ASI Out	BNC
HDMI	x 2
IP Streaming/Control	RJ45
Stereo Line Level Audio	2 x 5-pin 0B Lemo
RS232 Data	2 x 9-pin D-type

Ethernet

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

Video (dual decoding option)

Line Standard (SD)	PAL/NTSC
Resolution (HD)	720p50, 720p59, 720p60, 1080i50, 1080i59, 1080i60, 1080p23, 1080p24, 1080p25, 1080p29, 1080p30, 1080psf23, 1080psf24, 1080psf25, 1080psf29, 1080psf30, 1080p50, 1080p60
	HDMI
	IP MPEG-2 UDP Multicast
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	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

IP	MPEG-2 UDP/RTP/RTSP
-----------	---------------------

ASI

Mode	Byte or packet mode
------	---------------------

Data Interfaces

RS232 Data Output	1K2 to 115K2 baud switchable
-------------------	------------------------------

Control

Remote Control	Network Web Browser control interface RS232 Control from PC GUI Application
Local Control	Front Panel OLED display with navigation keys
Preset Loading	Front panel USB
On Screen Display	Spectrum, RX SNR, RX Power

Physical

Dimension	W 220mm, D 320 mm, H 44mm
Weight	TBC

Power

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

Environment

Temperature Range	-20 to +60°C
-------------------	--------------

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

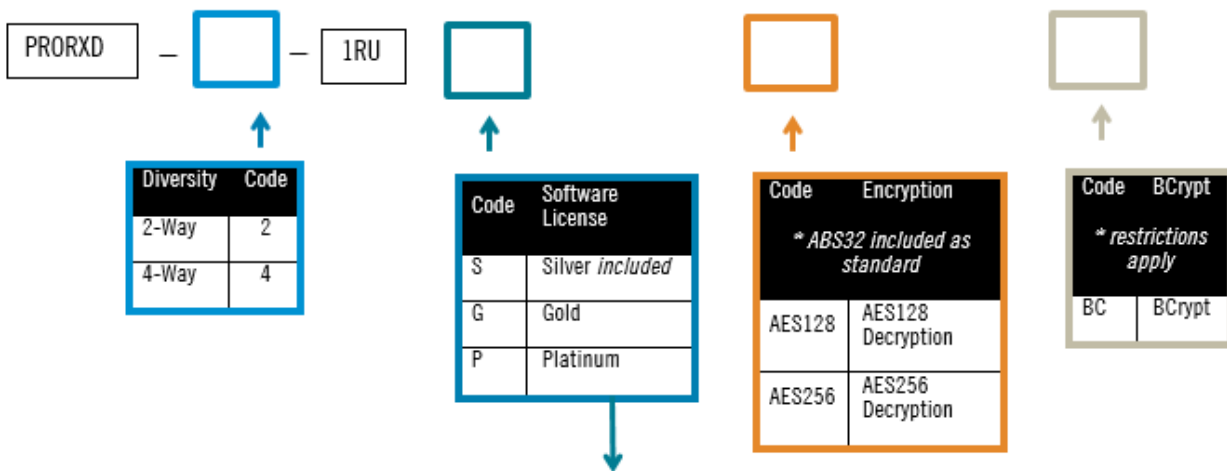
PRORXD - 1RU
Professional Receiver Dual Decoder
 COFDM – Video, Audio Telemetry and IP Products



April 2016 Data Sheet

DTC SALES CODE

Please enter required codes



Software License Code Includes	
Silver	DVB-T, MPEG-2, H.264 SD
Gold	Silver plus H.264 HD, MPEG-4 ASP, Narrowband 1.25MHz & 2.5MHz, IP Streaming
Platinum	Gold plus Ultra Extreme Narrowband 625kHz, Ultra Mobile Video Link (UMVL)

Product Code Includes	
PRORXD	1RU Receiver
CA0512	External XLR Audio Cable Assembly 2M
CA0579	HDTX External XLR Audio Cable Assembly 3M
CA0649	External 12V 6.67A 80W Desktop Power Supply Unit Assembly

Compatible Products (sold separately)	
Compatible Products (sold separately)	Compatible Products (sold separately)
SOLH264TX	SOLH264TX
SOL4DCAM	SOL4DCAM
SOL4MTX	SOL4MTX
SOL5TX	SOL5TX
SOL7NIX	SOL7NIX
SOL7HDNIX	Transmitter
SOL8SDR	Software Defined Radio

Related Accessories (sold separately)	
PRORXDSRFP-1RU	Single Rack Front Panel Extender 1RU
PRORXCPLKT-1RU	PRORXD-1RU 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

DTC – Solent
 Fusion 2,1100 Parkway
 Whiteley, Hampshire
 PO15 7AB, UK
 T: +44 1489 566 750

DTC – Tampa
 3845 Gateway Center Blvd Ste 360
 Pinellas Park
 FL 33782, USA
 T: +1 727 471 6900

DTC – Randers
 Haraldsveg 64B
 DK-8960
 Randers SØ
 Denmark
 T: +45 8791 8100

DTC – Brazil
 Av. das Nações Unidas
 12551- 17ºandar - Sala 1725
 04578-903
 São Paulo
 T: +55 11 3443 7545