ZMOD - X1

PROFESSIONAL SATELLITE MODULATOR (DVBS, DVBS-2)

Features

- DVBS-QPSK/DVBS2 (QPSK, 8 PSK) standard.
- Clear and user-friendly front panel control.
- Front panel monitor port.
- Only 10 inches deep and weighs 4.5 Lb.
- Rear panel Ethernet port for user interface.

The **ZMOD-X1** modulator series is an all inclusive unit that is loaded with features most needed by broadcasters. In it's most basic form, the unit comes with DVBS (QPSK), DVBS2 (QPSK and 8 PSK) modulation schemes, IF output, L band output and ASI input all as standard features. 16 and 32 APSK modulation and IP input are provided as options. Taking mobile and portable systems in mind, the unit comes with clear and user friendly front panel control. Size and weight are significantly less than any unit on the market. The unit can also be monitored and controlled using any web browser.

Specifications: ZMOD-X1 Satellite Modulator

Common

Signal format	CCM
Modulation format and FEC Rate	QPSK, FEC rates 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5 5/6, 8/9, 9/10 8PSK, FEC rates 3/5, 2/3, 3/4, 5/6, 8/9, 9/10[2]
Roll–off factor	0.2, 0.25, 0.35

Performance

Min Symbol Rate	100 kBaud
Max Symbol Rate	30 Mbaud 5 Mbaud
Min Symbol Rate Step	1 Baud
User Packet Size	188 bytes

IF/L – Band Interface

L–band Output	950 – 1750 MHz (L–band), 1 Hz Step 50Ω SMA–Female +5 to –25 dBm
IF Output	50 – 180 MHz, 1 Hz step 75Ω BNC–Female +5 to –30 dBm
Output power step	0.1 dB
Output power stability	+/– .5dB
Output power accuracy	+/– 0.5 dB
Monitor Output	50Ω BNC–Female L–band, 950–1750 MHz (when L–band output selected) –30 dB, +/– dB
Return Loss	Minimum 14 dB
Spurious	–60 dBc in any 4 kHz bandwidth
Phase Noise	100 Hz, –80 dBc/Hz 1 kHz, –85 dBc/Hz 10 kHz, –85dBc/Hz 100 kHz, –100 dBc, Hz 1 MHz, –110 dBc/Hz

Input Interfaces

DVB·ASI	1 for either DVB–S or DVB–S2 (75Ω BNC)
Ethernet	10/100 Base–T, rear panel
10 MHz Frequency	Connector: 50 Ω BNC–Female
Power	Male IEC 320 100–120 VAC, 220–240 VAC auto–ranging, 50–60 Hz Maximum consumption 75 W

Control Interfaces

SNMP	SNMPv2, Accessed over Ethernet physical interface.
Web Interface	Accessed over the Ethernet physical interface.
Alarms	Complete suite of parameters monitored. Access via GUI or SNMP, Comprehensive alarm history. Alarm relay contact – DB9 sockets

Physical

Size	19 inches wide, 1U (1.75 inches) high, 11 inches, deep, EIA standard 19 inch rack mountable
Weight	4.5 pounds

Environmental

Operating Temp.	0˚ to 50˚ C
Storage Temp.	–10˚ C to 55˚ C
Humidity·Operating	10% to 80% relative humidity non condensing
Electromagnetic Compatibility	EN 61000–1, EN 61000–6–3 FCC Title 47, Part 15
Safety	EN 61010–1 UL 61010–1

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