



EXOS Compact Satellite Video Transmission System

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EXOS COMPACT SATELLITE VIDEO TRANSMISSION SYSTEM

KEY FEATURES

- The EXOS is a complete, modular, satellite system
- The rugged, weatherproof packaging eliminates 19 inch racking and flight cases, and is built to withstand the harsh transport and operating environments of portable satellite terminals
- With EXOS units weighing only 3 Kg, when combined with the Mantis Flyaway Antenna range, the combination becomes the lightest, most portable, fully professional satellite terminal on the market today
- **Video MPEG-2** full broadcast quality DVB-S, 4.2.0 / 4.2.2 encoder/modulator. Super low delay encoding, with integral HPA controller
- **Block Up-converter** L band to SHF block up-conversion. Bands available from C to Ka. Can be used locally to encoder / modulator or remote up to 100m away
- **Satfinder** (optional) an easy to use tool to allow an unskilled operator to align the antenna
- Remote control of HPAs from the EXOS encoder / modulator unit
- 10 to 36 VDC, or 87 to 265 VAC operation
- All outdoor or split IDU / ODU operation
- Ultra lightweight, meets the latest airline 'check-in' weight and size limits



EXOS Softbag housing 2 units



SPECIFICATION

EXOS MPEG EXCITER UNIT

Video Parameters

Inputs

1 composite video: PAL / NTSC
1 SDI: 270 Mb/s (with/without embedded audio)
ANSI / SMPTE 259M / ITU-R BT.656.

Encoding

Data Rate

4:2:0 @ 1-15 Mbits
Delay <200ms

Option

4:2:2 @ 2.5-41 Mbits

Option

Low Delay 50 ms / <100ms

Option

BISS scrambling

Data Channel

RS232 @ 9.6-19.2 kbaud

Audio Parameters

Inputs

2 analogue stereo pairs / 4 mono
600 Ω / 20k Ω input impedance

Option

2 dual / 4 mono embedded in SDI

Option

AES / EBU (2 pairs) inputs

Encoding

MPEG-2 Layer 1 or 2
Linear PCM
128-384 kbs channel

MODULATION

DVB-S

QPSK 1 - 26.7 Msym/s

FEC

1/2, 2/3, 3/4, 5/6, 7/8

Options

8PSK and/or 16QAM/DVBS-2

Output

L band 950 to 1750 MHz

Tuning

1 kHz steps

Output Power Level

L-band -10 dBm

Gain Adjustment

40 dB in 0.1 dB steps

L-Band Monitor

N-type

HPA Control via L band

Serial control for: Xicom, e2V, Paradise,
Sophia Wireless, CPI.

EXOS BLOCK UP-CONVERTER

Including HPA control converter

L band in to SHF output

Bands available C to Ka

Output +10 dBm min

HPA control decodes signal on L band cable

Models by Xicom, e2V, Sophia Wireless, CPI
and Paradise currently supported, others to
order.

EXOS SATFINDER (optional)

Features

GPS and optional compass

Satellite orbit position calculation software

Operator Interface

Satellite location display with beacon level and
audio assisted antenna alignment.

Input

950 to 2050 MHz synthesised in 1 kHz steps.

Monitor point 950 to 2050 MHz (-10 dB on
input).

LNB Power

DC on coax

Beacon Receiver

Features and specifications as per BR4951

EXOS POWER SUPPLY (optional)

Switched outputs, via breaker, DC outputs.

Mains loop through for HPA.

EXOS SOFTBAGS (optional)

Providing transportation package.

Provision to hold two EXOS units per bag,
plus associated connecting cables.

Softbags or hard aluminium case version
available.

GENERAL

Powering

10 - 36 volts DC (from external battery or
standard camera power supply).

87 - 265 VAC, 47 - 63 Hz (EXOS optional
waterproof PSU).

Housing

Weatherproof (IP65)

Dimensions

364 x 310 x 55 mm

Weight

Approx 3 Kg each nominal, depending on
module

Connectors IP65

Temperature

Operational -20° to +60°C

Storage -20° to +80°C





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Issue: 12/08

These specifications are accurate at the time of issue but may be subject to change and will not form part of any contract.