



Introduction

DSM-1903OEM works professionally performing module based on the DVB-S, DVB-S2, DVB-S2X standard. It is compatible with any kind of DSNG devices.

Feature

- DVB-S/S2/S2X DSNG Modulation
- DVB-MPEG-TS over ASI
- DVB-MPEG-TS over IP
- L-Band Output 950 ~ 2150MHz Step 1Hz
- IF Output 50 ~180 MHz Step 1Hz
- External 10 MHz input for external clock synchronization
- Internal 10 MHz Reference Frequency
- Symbol Rate 1 ~ 50 Mbaud
- RS232 control port with SCPI protocol
- HTTP over Ethernet (web browser)
- Block Up Converter (BUC)

Competitiveness

- Professional RF signal performances
- DSNG Applications
- Excellent RF out
- Satellite Distribution
- Satellite Contribution
- Easy integration for any DSNG devices

Options

- Output : L-band or IF-band Select
- BUC(Block Up Converter) : 12V, 18V, 24V

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Specification

RF

L-band	Connector SMA 50Ω 950 MHz to 2150 MHz, 1Hz steps -24.5 dBm to +7.00 dBm, 0.25db steps
IF-band	Connector SMA 75Ω 50 MHz to 180 MHz, 1Hz steps -26.75 dBm to +5.00 dBm, 0.25db steps
SNR	> 40 dB @ 0 dBm -16 APSK - 30 Mbaud
Shoulders Rejection	< -50dB @ 0 dBm & f/fN=1.5 for roll off 20%
Spurious	950 to 2150 MHz -60 dBc outside the useful band

DVB-S

Mode Code	
Outer/Inner FEC	Reed Solomon/Viterbi
QPSK	1/2, 2/3, 3/4, 5/6, 7/8
8PSK	2/3, 5/6, 8/9
16QAM	3/4, 7/8
Roll-Off	0.35 (DVB-S/DSNG Standard)
BISS	Mode (1, E Injected, E Buried and 0)
Symbol Rate	1 ~ 50 Mbauds

DVB-S2

Mode Code	
Outer/Inner FEC	BCH/LDPC
QPSK	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10
16APSK	2/3, 3/4, 4/5, 5/6, 8/9, 9/10
32APSK	3/4, 4/5, 5/6, 8/9, 9/10
Roll-off	0.35, 0.25, 0.20, 0.15, 0.10, 0.05, 0.03
BISS	Mode (1,E Injected, E Buried and 0)
Symbol Rate	1Mbaud to 50Mbauds, 1 baud steps
Pilot Insertion	
Operation Mode	CCM Only
Frame Length	Short (16 200) & Normal (64 800)
PL Scrambling codes	0 ~ 262141 (DVB-S2 Standard)
Pilot Insertion	O

DVB-S2X

Mode Code	
Outer/Inner FEC	BCH/LDPC
QPSK	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20, 11/45, 4/15, 14/45, 7/15, 8/15, 32/45
8PSK	3/5, 2/3, 3/4, 5/6, 8/9, 9/10, 23/36, 25/36, 13/18, 7/15, 8/15, 26/45, 32/45
8PSK-L	5/9, 26/45
16APSK	2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90, 7/15, 8/15, 26/45, 3/5, 32/45
16APSK-L	1/2, 8/15, 5/9, 3/5, 2/3
32APSK	3/4, 4/5, 5/6, 8/9, 9/10, 32/45, 11/15, 7/9, 2/3, 32/45
32APSK-L	2/3
64APSK	11/15, 7/9, 4/5, 5/6
64APSK-L	32/45
128APSK	3/4, 7/9
256APSK	32/45, 3/4
256APSK-L	29/45, 2/3, 31/45, 11/15
PL Scrambling Codes	0 ~ 262141 (DVB-S2 Standard)
Operation Mode	CCM only
Frame Length	Short(16 200) & Normal(64 800)
Pilot Insertion	O
Symbol Rate	1Mbaud to 50Mbauds, 1 baud steps
Roll-off	0.35, 0.25, 0.20, 0.15, 0.10, 0.05, 0.03

General

Power Supply	12VDC - 30W 24VDC - 60W (Selecting BUC option)
Weight	0.9 Kg
Dimensions	220 x 110 x 44 (L x l x H)