

INGRON9010MSS DVB-S2 Modulator



Features

- Standard of DVB-S2(EN302 307, 8PSK) and DVB-S(EN300 421, QPSK)
- Input with 4*ASI and output with 1*Tuner by QPSK/8PSK modulation
- RF output frequency in range 950~2150MHz(L-band), or 50~200MHz(IF) optional
- BISS scrambling(BISS-0, BISS-1, BISS-E) mode supported
- 1* 10MHz reference clock input and loop out optional
- 24V/4A coupling power out optional
- SFN TS(with MIP or IIP) transmission optional
- 16APSK, 32APSK constellation optional
- TS over IP input available, UDP protocol, 10/100M
- Easy operation and upgrading by keyboard or LCD
- Management by NMS

Specifications

Input

TS Input	Number	4*ASI, hot backup supported
	Interface Standard	EN 50083-9 ASI
	Mode:	byte or burst
	MPEG Frame	188/204 bytes
	Connector	BNC interface, 75Ω
IP Input	Number	1*TS over IP, UDP protocol
	Connector Type	RJ45, 10/100M
10MHz Input(<i>optional</i>)	Number	1* 10MHz reference clock

Modulation

DVB-S Mode	Standard	EN300 421
	Constellation	QPSK
	FEC Coding	RS(outer) + Convolution(inner)
	FEC Coding Rate	1/2, 2/3, 3/4, 5/6, 7/8
	Roll-off Factor	0.2, 0.25, 0.35
	Symbol Rate	0.05 ~ 45 Msps
	BISS Scrambling Mode	BISS-0, BISS-1, BISS-E
DVB-S2 Mode	Standard	EN302 307
	Constellation	QPSK, 8PSK
	FEC Coding	BCH(outer) + LDPC(inner)
	FEC Coding Rate	(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
	Roll-off Factor	0.2, 0.25, 0.35
	Symbol Rate	(QPSK) 0.05~45 Msps; (8PSK) 0.05~30 Msps
	BISS Scrambling Mode	BISS-0, BISS-1, BISS-E

Output

Output	Number	1*RF
	Frequency Range	(L-band) 950 ~ 2150 MHz, successsionally adjustable; (IF) 50 ~ 200 MHz(optional)
	Out Attenuation	-41.5 ~ -10 dB, by 0.5 dB stepping; -31.5 ~ 0 dB, by 0.5 dB stepping(IF)
	Frequency Stability	0.1 PPM
	MER	≥36 dB (RF); ≥40 dB (IF)
	Connector Type	N interface, 50Ω
10MHz Out (optional)	Number	1* 10MHz reference clock

More for Option

24V/4A power coupling
SFN TS(with MIP or IIP) transmission
16APSK, 32APSK constellation

Management

Network Control	by SNMP/NMS
Local Control	LCD and keyboard on front panel
Upgrading	by Ethernet software
Language	English

General

Voltage	100~240V AC, 50/60Hz
Consumption	25 W
Environment	0~45°C (Operation), -20~80°C (Storage)
Dimension (W*D*H)	482*410*44 mm
Gross Weight	4.5 KGS

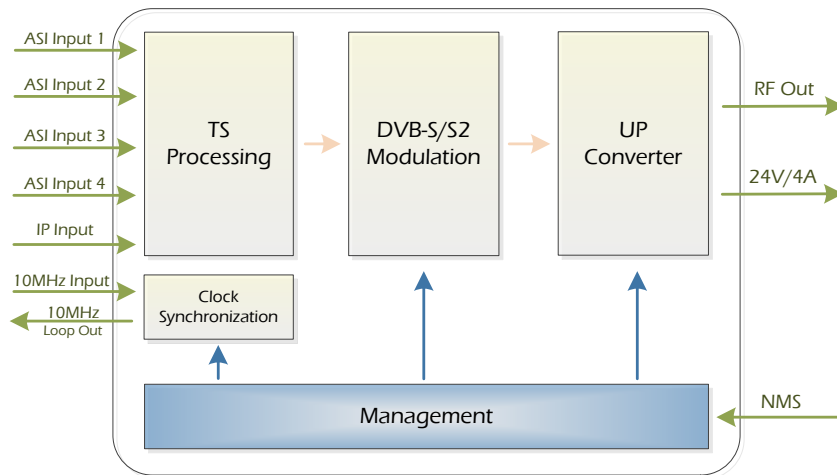
Introductions

INGRON9010MSS DVB-S2 Modulator is designed based on the standard of EN302 307, 8PSK, simultaneously compatible with DVB-S(EN300 421, QPSK). It is able to process signals from ASI or IP inputs and modulate them by 8PSK/QPSK standards. Output frequency range in 950~2150MHz(RF) or 50~200MHz(IF) is optional according to physical applications. The device offers an external 10MHz reference clock in and a loop out interface. 24V/4A power coupling output can also be configured if needed. BISS scrambling(BISS-0, BISS-1, BISS-E) is supported with INGRON9010MSS and SFN TS(with MIP/IIP) packet transmission is optional, too. The device is able to be applied to FM microwave system, MMDS, digital TV broadcasting, news gathering, interactive services, broadband satellite systems, and so on. RMSS90 10 well satisfies the growing adoptions of digital satellite TV systems.

Rear Panel



Diagram



Options

	INGRON9010MSS -10	INGRON9010MSS -20	INGRON9010MSS -30	INGRON9010MSS -40	INGRON9010MSS -50	INGRON9010MSS -60
RF Out Range	950~2150MHz	950~2150MHz	950~2150MHz	950~2150MHz	950~2150MHz	50~200MHz
24V/4A Coupling Power	/	/	/	YES	YES	YES
10MHz Clock In & Out	/	YES	YES	YES	YES	YES
SFN TS (with MIP or IIP)	/	/	/	/	YES	/
16APSK, 32APSK Constellation	/	/	/	/	YES	/
ASI Input	4*ASI	4*ASI	4*ASI	4*ASI	4*ASI	2*ASI
100M TSolP	/	/	1*IP	1*IP	1*IP	1*IP
Tuner Output	1*RF	1*RF	1*RF	1*RF	1*RF	1*IF+1*IF(test)