

NN6-1160

MFN Modulator (DVB-T,DVB-H)

170-860 MHz RF Output



The perfect mate for DVB-T / DVB-H

All DVB-T modes supported
Full DVB-H support (optional)

RF (VHF/UHF) output in the
170-860 Mhz continuous band

MFN mode support

Ethernet Remote control-able

1x DVB-ASI input

1x DVB-ASI Loophrough

1x USB2.0 input (optional)

2x RF outputs

Compact and robust

19" rack mountable

Designed & packaged for the following applications:

- 1 DVB-T OR DVB-H RECEIVER R&D**
- 2 TEST & VALIDATION**
- 3 DEMONSTRATION & ROADSHOW**

NN6-1160 is the perfect fit for your needs in DVB-T and/or DVB-H development and testing. It does any of modulation modes supported by these standards and can be set to any country's broadcasting mode.

Through the use of Profiles, it is straight to save and retrieve modulation parameters (incl. Frequency and Output Power) and smoothly integrate the transmitting aspects within complete QA test campaigns.

INPUTS	
MPEG TS inputs	1x ASI input on BNC connectors (75Ω adapted) Bit rate: from 3.11 Mbps to 31.76 Mbps 188/204 bytes + burst/continuous mode supported Automatic TS adaptation (PCR time restamping)
MPEG TS Loophrough	1x ASI loophrough on BNC connectors (75Ω adapted) Same content as input

OUTPUTS	
Modulated outputs	DVB-T or DVB-T/H according to option RF outputs in the 170-860 Mhz band Main out @ 0 dBm, Monitoring out @ -20 dBm Attenuation possible from 0 to 10dB (step 1dB) 2k, 8k FFT sizes (4k with DVB-H option) 6, 7, 8 Mhz channel bandwidth (5MHz with DVB-H option) ¼ to 1/32 settable guard interval ½ to 7/8 settable code rates 16 to 256QAM constellation TPS Signalization (incl DVB-H ones with DVB-H option)

Electrical specifications	MER > 38 dB Shoulder & Out of Band Rejection > 50 dB Harmonics & spurious > 55 dB Output level stability: ± 1 dB
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SPECIAL FEATURES	
Test modes	Useful modes for testing & measurement - Null symbol insertion (mega frame level) - Cancellation of 251 central carriers - Insertion of 23-bits PRBS in place of ASI input

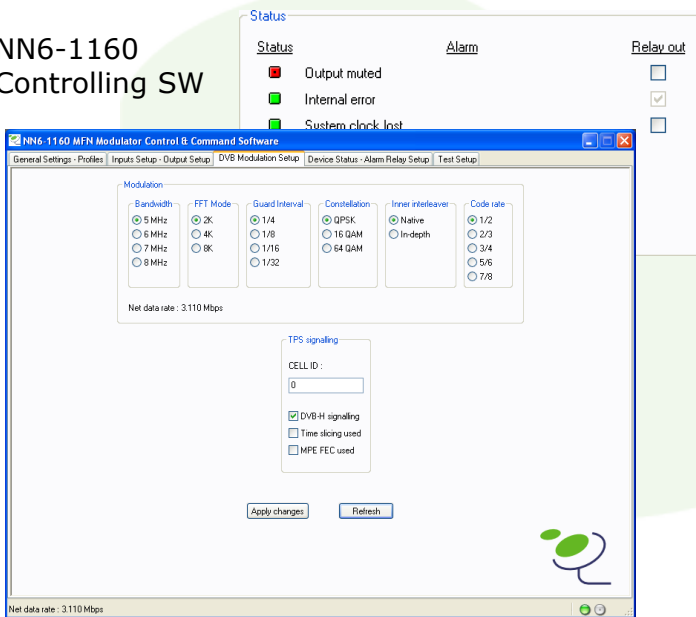
ALARM / STATUS	
Alarms	1x alarm output (Jack 3.5mm: dry relay) Can be connected to Dry relay / SNMP module Compatible with alarm manager systems
Status led	3 levels state indicator on front panel

MECHANICAL	
Dimensions (whd)	330 x 44 x 273 (in millimeters) 13 x 1,73 x 10,7 (in inches)
Weight	5 kg (11 lb)
Power	90-240 VAC on IEC connector, 40W

GENERAL	
User Interface	LCD and buttons on front panel
Rack mount kit	19" mounting kit (1RU height)
Control & Monitoring	10/100baseT Ethernet interface Embedded TCP/IP server Control & Command application (Windows) Modulator setup can be saved/retrieved as profiles
	No limitation in number of profiles

ORDERING CODES	
NN6-1160RF	DVB-T modulator, RF agile output (170-860MHz)
NN6-DVB-H	DVB-H option to address mobile receivers
NN6-USB2ASI	USB2 to DVB-ASI adapter with TS playing SW
NN6-ATT40	40 dB internal attenuation on main output
NN6-RFANT	RF antenna with BNC connector for smart demos
RFBooster 1W	30dB standalone external amplifier, A- Class linear

**NN6-1160
Controlling SW**



About ENENSYS Technologies:

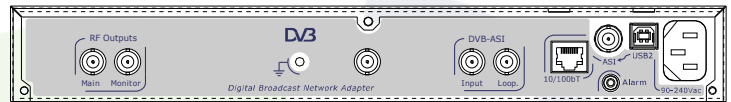
ENENSYS Technologies proposes a large range of Digital TV interfaces surely meeting your interoperability needs in the broadcast field. With its Baseband Converters line, ENENSYS Technologies provides solutions to interface MPEG2 DVB or ATSC baseband signals over DVB-ASI, M2S, M2P, DVB-SPI (LVDS, TTL), RS-422, SSI, SMPTE-310... ENENSYS' Network Adapters product line definitely is broadcasting networks oriented (DVB-T / DVB-H, QPSK, QAM...) and also aims at interfacing MPEG2 equipments with IT networks (USB2, Gigabit Ethernet...).

ENENSYS Technologies

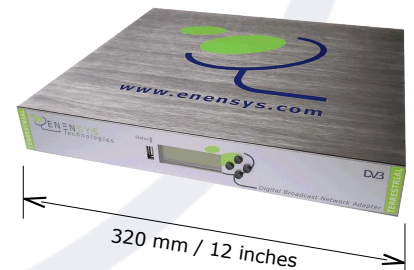
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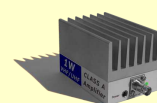
NN6-1160 rear panel drawing



19" 1RU rack mountable... but compact



RELATED PRODUCTS



1W linear Amplifier



USB2.0 based MPEG2-TS Stream Player



USB2.0 based MPEG2-TS Stream Recorder, Analyzer, Decoder