

NN6-TDMB

T-DMB / DAB

Professional Terrestrial Modulator



Enabling "TV on Mobile" Roll-Out

- All DVB/DAB modes supported
- Full T-DMB support
- RF, IQ or IF outputs
- Redundant inputs (2x ETI in)
- SFN support
- Embedded TCP/IP server
- Optional USB2.0 input
- Fault relay alarm

- High performance modulator
- Rich connectivity and I/Os
- Compact and robust
- 19" rack mountable

Designed & packaged for the following applications:

- 1 BROADCAST TRANSMISSION**
- 2 T-DMB or DAB RECEIVERS R&D**
- 3 TEST & VALIDATION**
- 4 DEMONSTRATION**

ENENSYS Technologies

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TECHNICAL SPECIFICATIONS

INPUTS	
ETI inputs	2x ETI redundant inputs NI or NA network framing supported (auto detection) Redundant inputs with automatic switching Bit rate: 2048 kbits/s RS error correction (NA only)
Clock & Synchronization	Internal TCXO (0.5 ppm) 10 Mhz and 1PPS GPS compatible external references for SFN operation mode support 10MHz input on BNC connector (50 Ω adapted) Timestamp extraction for SFN synchronization (NI, NA)
OUTPUTS	
Modulated outputs	NN6-TDMBIF: 2x IF outputs (30-40MHz, step 1Hz) Main out @ 0 dBm, Monitoring out @ -10 dBm Attenuation possible from 0 to 10dB (step 1dB) NN6-TDMBIQ: I and Q baseband outputs (baseband) Output level: -10 dBm NN6-TDMBRF: 2x RF agile filtered output (VHF band) Main out @ 0 dBm, Monitoring out @ -10 dBm Attenuation possible from 0 to 10dB Modulation according to ETS 300 401 Supports DAB modes I, II, III, IV Energy dispersal, Convolutional coding/puncturing Time/Frequency interleaving, DAB frame builder Insertion of the time/frequency/phase Synchronization Symbols (NULL and TFPR symbol) Insertion of TII (Transmitter Identification Information) MER > 40dB Very low phase noise clock Shoulder & Out of Band Rejection > 50 dB Harmonics & spurious > 50 dBc
Electrical specifications	

SPECIAL FEATURES	
Test modes	Useful modes for testing & measurement - internal generation of ETI loaded test stream - Synchronization test mode - central carriers cancellation

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

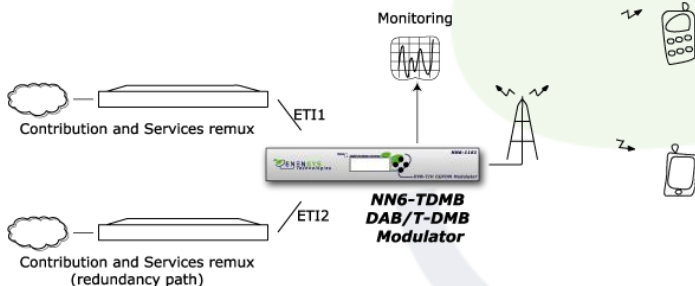
MECHANICAL	
Dimensions (whd)	330 x 44 x 273 (in millimeters) 13 x 1,73 x 10,7 (in inches)
Weight	4.5 kg (9.9 lb)
Power	90-240 VAC on IEC connector, 40W

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 SW (Windows, Linux) Modulator setup can be saved/recalled
	No limitation in number of profiles

ORDERING CODES	
NN6-TDMBRF	DAB/T-DMB modulator, RF agile output (VHF)
NN6-TDMBIF	DAB/T-DMB modulator, IF output (30-40MHz)
NN6-TDMBIQ	DAB/T-DMB modulator, I&Q outputs
NN6-DPC	Digital Pre-Correction
NN6-SNMP	SNMP alarm traps generation module
USB2ETI	USB2.0 to ETI (G703) adapter with stream player

Full DAB modes supported (I, II, III, IV)
SFN mode supported
Controllable by ETI control information

Designed for Broadcast Transmitters
Full set of high end functionalities



About ENENSYS Technologies:

ENENSYS Technologies proposes a large range of Digital TV interfaces surely meet 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, DAB / T-DMB, QPSK, QAM...) and also aims at interfacing MPEG2 equipments with IT networks (USB2, Gigabit Ethernet...)

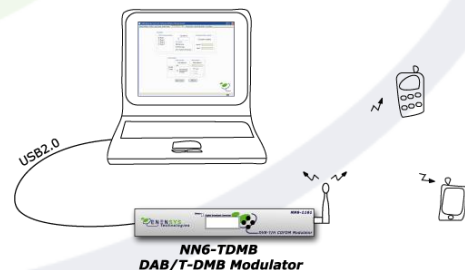
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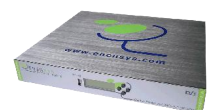
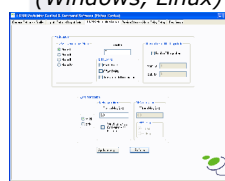
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Extremely open input stage
ETI NI and NA modes supported
Optional USB2 input with ETI stream player

Compact and handy
Immediate deployment over development areas
Easy configuration profile save and recall
Internal stream generation & test modes



Control & Command (Windows, Linux)



PLUG ORDERING CODE	
NN6-TDMBxxEU	EU plug
NN6-TDMBxxUK	UK plug
NN6-TDMBxxUS	US plug

Xx= RF, IF or IQ