

NN6-1161

DVB-T / DVB-H
Professional Terrestrial Modulator



Enabling "TV on Mobile" Roll-out

- All DVB-T modes supported
- Full DVB-H support (opt.)
- RF or IF output acc. to model
- RF: VHF/UHF output
- MFN and SFN modes support
- Hierarchical mode support
- Ethernet Remote control-able
- USB2.0 input (optional)
- SNMP Module (optional)
- Digital Pre-Correction (optional)
- Fault relay alarm
- Rich connectivity and I/Os
- Compact and robust
- 19" rack mountable

Designed & packaged for DVB-T and DVB-H broadcast, trials and roll-outs :

- Tough and robust design, Rich connectivity
- SFN native capability
- TCP/IP server for remote operation
- Modulation profiles easy load/save
- Alarm generation to HW relay
- 19" 1RU rack mount kit

TECHNICAL SPECIFICATIONS

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| INPUTS | |
| MPEG TS inputs | 4x ASI inputs on BNC connectors (75Ω adapted) Bit rate: from 3.11 Mbps to 31.76 Mbps 188/204 bytes + burst/continuous mode supported Hierarchical mode supported (High & Low priority) 2 redundant inputs per priority Seamless switching (SFN mode) in less than 1 second Automatic TS adaptation (PCR time restamping) MIP extraction NIT update with current parameters Internal TCXO (0.5 ppm) |
| Clock & Synchronization | 10 Mhz and 1PPS GPS compatible external references for SFN operation mode support 10MHz input on BNC connector (50 Ω adapted) Auto synchronization on data and 10MHz generation |
| OUTPUTS | |
| Modulated outputs | DVB-T or DVB-T/H according to option NN6-1161IF : 2x IF outputs (30-40MHz) Main out @ -10 dBm, Monitoring out @ -20 dBm Attenuation possible from 0 to 10dB (step 0.1dB) NN6-1161IQ : I and Q baseband outputs (baseband) Output level: -10 dBm NN6-1161RF : 2xRF agile & filtered outputs (50 ohms) VHF band III (173-226MHz) and UHF band IV & V (473-858MHz) Output level: 0 dBm (main), -20dBm (monitoring) Attenuation possible from 0 to 10dB (step 0.1dB) 2k, 8k FFT sizes (4k with DVB-H option) 5, 6, 7, 8 Mhz channel bandwidth ¼ to 1/32 settable guard interval ½ to 7/8 settable code rates (HP & LP) QPSK, 16QAM or 64QAM constellation Hierarchical parameter in alpha 1/2/4 TPS Signaling (incl DVB-H ones with DVB-H option) MFN/SFN modes of network operation Optional Digital linear & non-linear Pre-correction MER > 38 dB Extremely low phase noise clock Shoulder & Out of Band Rejection > 50 dB Internal frequency stability: 0.5 ppm Output level stability: ± 0.1 dB Return loss > 10 dB Harmonics & spurious > 55 dB |

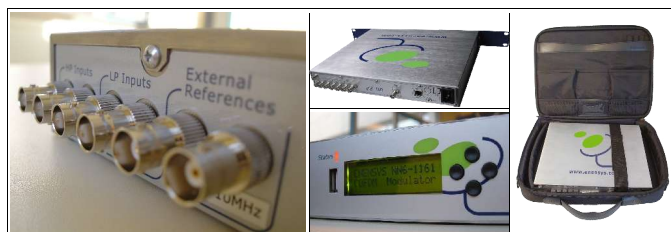
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| SPECIAL FEATURES | |
| Test modes | Useful modes for testing & measurement - Null symbol insertion (mega frame level) - Cancellation of 251 central carriers - Insertion of 23-bits PRBS in place of ASI input |

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| 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 |

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| 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 |

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| 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 |

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| ORDERING CODES | |
| NN6-1161RF | DVB-T modulator, RF agile output (VHF+UHF) |
| NN6-1161IF | DVB-T modulator, IF output (30-40MHz) |
| NN6-1161F70 | DVB-T modulator, IF output (70MHz) |
| NN6-DVB-H | DVB-H option to address mobile receivers |
| NN6-USB2ASI | USB2 to DVB-ASI adapter with TS playing SW |
| NN6-DPC | Digital Pre-Correction (linear, non-linear) |
| NN6-RFANT | RF antenna with BNC connector for smart demos |
| NN6-SNMP | SNMP alarm monitoring module |



About ENENSYS Technologies:

ENENSYS Technologies designs and manufactures high end products for Digital TV broadcast, with a special focus on:

- Mobile TV Broadcast
- Digital Terrestrial TV (DDTV)
- TS over IP content distribution

ENENSYS has a complete product line with modulators, SFN adapters, IP/MPEG2 and MPEG2/IP distribution adapters for DVB-T or DVB-H broadcast.

ENENSYS targets the excellence of delivered products, releasing the most compact and robust products on the market. ENENSYS experts in DVB-T and DVB-H are ready to answer your questions, please feel free to contact them through contact@enensys.com

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| PLUG ORDERING CODE | |
| NN6-1161xxEU | EU plug |
| NN6-1161xxUK | UK plug |
| NN6-1161xxUS | US plug |

Xx= RF or IF

