

INT-PDML-HD1



PORTABLE AUDIO/VIDEO
RADIO LINK

Key Features

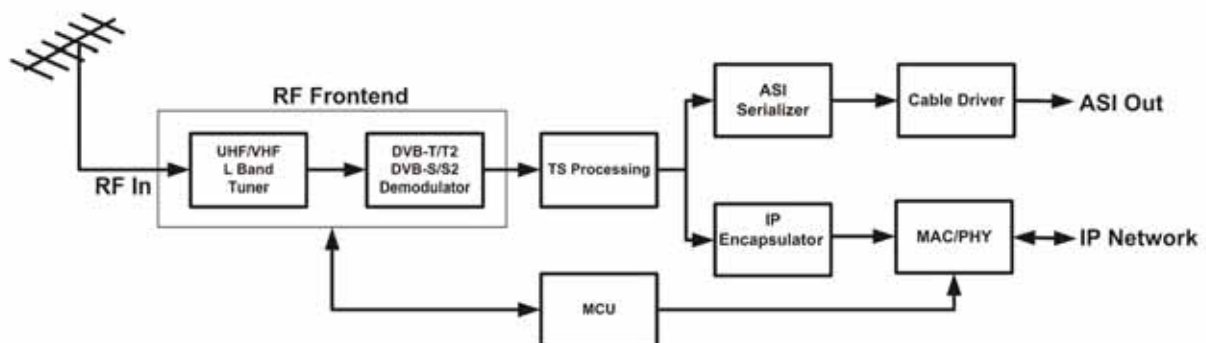
- Fully compliant to EN300744 and EN302755 Standards.
- Simple and quick installation and commissioning.
- Easy Maintenance thanks to modular design.
- Equipped with NEL manufactured H.263/H.264 encoder core featuring low processing delay.
- Weatherproof RF head units.
- Exceptional RF efficiency thanks to advanced pre-correction mechanisms.
- Excellent reliability due to the employment of 1+1 configuration and the ability to automatically switch over to redundant transmission.

General information

Intech audio/video digital MW portable link, INT-PDML-HD1, is a versatile, easy to use, easy to carry and rugged digital portable link. It is a unilateral radio link with a set up time less than 20 minutes. It interfaces directly to cameras of any type at the transmitter side without any additional equipment in between.

The variety of standard inputs and outputs and wide range of supply voltage are considered as main features which make INT-PDML-HD1 a highly flexible solution. Utilization of multicarrier modulation and advanced channel coding techniques according to EN300744 and EN302755 standards has caused superior resiliency and robustness of link in urban as well as rural environments.

Putting all above in a nut shell, INT-PDML-HD1 is a highly economic, flexible and reliable solution for TV reportage applications or live covering of events.



INT-PDML-HD1 Block Diagram

Technical Specifications:

RF Parameters:

- Frequency band of operation: 10.4GHz to 10.7GHz
- Tuning Resolution: 1MHz
- TX Output Power: Max 30 dBm @ QPSK
- RX sensitivity: -93 dBm @ QPSK for QEF reception

Coding and Modulation Parameters:

- DVB-T:
 - Modulation Type: OFDM 2k, 4k, 8k
 - Guard Interval: 1/4, 1/8, 1/16, 1/32
 - Modulation Modes : QPSK, 16QAM, 64QAM
 - FEC: 1/2, 2/3, 3/4, 5/6, 7/8
 - Channel Bandwidth: 7, 8 MHz
 - Maximum Throughput: 31.67Mbps
- DVB-T2
 - Modulation Type: OFDM 1k, 2k, 4k, 8k, 16k, 32k (Normal/Extended)
 - Guard Interval: 1/4, 1/8, 1/16, 1/32, 1/128, 19/256, 19/128
 - Modulation Modes : QPSK, 16QAM, 64QAM, 256 QAM (Normal and Rotated)
 - FEC: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
 - Channel Bandwidth: 8MHz
 - Maximum Throughput: 50.34Mbps

Video Inputs /Outputs:

- Composite Video (PAL/NTSC, 525 Lines, 625 lines)
- SD-SDI (complying SMPTE 259M along with SMPTE272M for audio embedding)
- HD-SDI (complying SMPTE 292M along with SMPTE299M for audio embedding)
- DVB-ASI (complying EN 50083-9)

Video Encoder/Decoder:

- Video Coding Standards: MPEG2, MPEG4 AVC /H.264
- MPEG2 supported profiles and levels:
 - MP@ML 512 kbps÷15 Mbps
 - 422P@ML 3 Mbps÷50 Mbps
- MPEG4 AVC supported profiles and levels:
 - Profiles: Baseline, Main, High, High 422
 - Levels: 3, 3.1, 3.2, 4, 4.1
 - Minimum achievable bit rate: 256kbps

Audio Inputs/Outputs:

- Two analog stereo channels
- Two digital stereo channels with AES/EBU format

Audio Encoder/Decoder:

- Audio Coding Standards: MPEG1 layer II, AAC, AAC+, HE-AAC-V2

Power Requirement:

- AC Supply: 90÷260 V

Physical:

- Dimensions:
 - Head Units: 22× 22.4 × 15.4 cm (H x W x D)
 - TX Control Units: 4.4 cm x 48 cm x 30 cm (H x W x D)
 - RX Control Units: 4.4 cm x 48 cm x 50 cm (H x W x D)
 - Parabolic Antenna Diameter: 60 cm (Gain: 32dBi), 90 cm (Gain: 35dBi)
 - Tripod: 1m
 - Triax length: 150 m (Up to 300 meter supported)
- Weight:
 - Head Units: app. 9Kg
 - Control Units: 8Kg
 - Parabolic Antenna: 4kg (60 cm antenna With Feed)
 - Tripod: 17 Kg
 - Spool Weight: 17 kg (With Cable)

Environmental conditions:

- Head Units
 - Inventory Temperature -30 ÷ +55 C
 - Operation Temperature -20 ÷ +50 C
 - Altitude 5000m above sea level
 - Humidity 95% Long term
- Control Units
 - Inventory Temperature -20 ÷ +50 C
 - Operation Temperature -10 ÷ +45 C
 - Altitude 5000m above sea level
 - Humidity 95% Long term

How to Order (others version on request):

INT-PDML-HD1 – base unit

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