

NetMode6420

Professional DVB-T2 Modulator



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NetMod6420 DVB-T/T2 modulator is our new product developed complying with the DVB-T2 standard. With its advanced modulating technology, this modulator can effectively make use of the ground spectrum resources and make it possible to provide reliable signals for fixed, mobile and portable devices. Compared with DVB-T, the channel capacity is increased by 30% under the similar carrier to noise ratio (CNR) threshold.

It has been designed to provide a cost effective and high quality solution for broadcast network operators, system integrator and transmitter manufacturers aiming to deploy digital TV services over DVB-T2 networks in MFN environments.

NetMod6420 single Physical Layer Pipes (PLPs), MFN operation, and SISO/MISO transmission through its ASI and IP port.

Moreover, this device can be upgraded and controlled through network system, which allows it to be widely used in setting up digital broadcasting network and provide good signals for scientific laboratory and DVB-T2 STB.

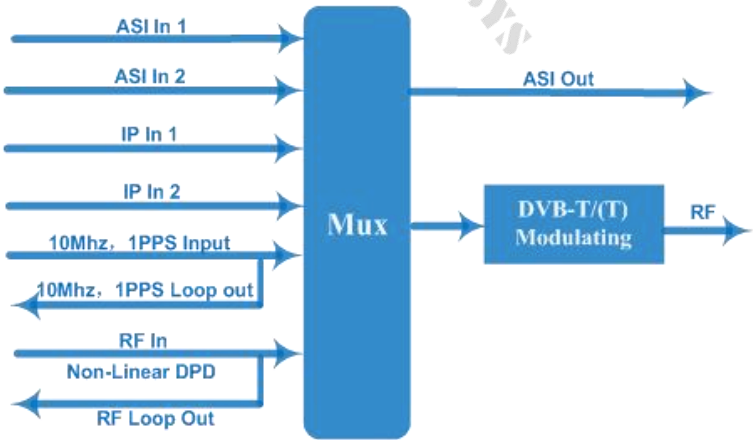
Features

- Fully complying with EN302 755 and EN300 744 standard
- 2*ASI input ports
- 2* ASI output ports
- all 4 inputs ports are hot backup
- TS over 2* IP input (UDP)
- 10MHz input/loop out, 1PPS input/loop out
- DVB-T2 RF output
- Supports single PLP
- MISO and SISO supported
- Support QPSK/16QAM/64QAM/256QAM (normal or rotated)
- Support TS format: TS (Mode A)
- Support PID bypass and pass-through (developing)
- Output signal bandwidth: 5M, 6M, 7M, 8MHz
- Support MFN net mode
- Supports non-linear digital pre-distortion (DPD)
- RF output level: -15 ~ 5 dBm, 0.1db stepping
- Constant temperature crystal oscillator, as high as 0.1ppm stability
- Support online upgrade
- Keyboard operation and LCD display
- Web Network management system (GUI)
- passed the EU CE&RoHS certification

Application

- MFN transmissions
- DVB-T2 digital TV broadcast
 - SISO/MISO transmission
 - Single PLP broadcasting
 - Regional TV distribution
- DTT transmitters integration

Principle Chart



TECHNICAL SPECIFICATIONS

Input
2 ASI input& 2 IP input, can only select 1 input as source, but all 4 inputs ports are hot backup
10MHz reference clock input and loop out, BNC interface
1PPS input and loop out, BNC interface

Multiplexing(developing)
Maximum PID Remapping 128 input per channel
Function PID remapping (automatically or manually)
Accurate PCR adjusting
Generate PSI/SI table automatically

RF Out
Connector N Type, 50Ω Impedance
RF range 150~999Mhz, 1hz stepping
Output level ATT -15 ~ 5 dBm, (step 0,1 dB)
MER > 43db in the whole band
Shoulder Level >56dB

Modulation
DVB-T2
Standard EN302 755
Mode A single-PLP
PLP Constellation QPSK, 16QAM, 64QAM, 256QAM (Normal or Rotated)
L1 post Constellation BPSK, QPSK, 16QAM, 64QAM
FEC Length Short(16K), Normal (64K)
FEC Rate 1/2, 3/5, 2/3, 3/4, 4/5, 5/6

FFT Mode 1k, 2k ,4k, 8k, 16k, 32k (normal or extended)
Bandwidth 5MHz, 6MHz, 7MHz, 8MHz
Network Mode MFN
Pilot Pattern PP1 - PP8
Guard Interval 1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4

DVB-T
Standard EN300 744
FFT Mode 2K, 8K
Bandwidth 5MHz, 6MHz, 7MHz, 8MHz
Constellation QPSK, 16QAM, 64QAM
Guard interval 1/4, 1/8, 1/16, 1/32
FEC 1/2, 2/3, 3/4, 5/6, 7/8
Network Mode MFN

Management
Interface 1 x 10/100 Base-T Ethernet
Connector RJ-45
Management Easy-to-use Web based GUI

Environment
Power AC 220V±10%, 50/60Hz
Consumption 34W
Operating Temperature 0 ~ 45℃
Storage Temperature 20 ~ 80℃
Dimensions 482mm × 410mm × 44mm
Weight 4.8kg