

# EDISION®



## ***HDMI Modulator single DVB-T***

# DVB-T

### Features

- ▶ DVB-T standard Compliant
- ▶ 3-Processor System W/Host: CPU: 200MHz 32Bits RISC/  
Security Processor: 200MHz 32Bits/ Audio Processor: 200MHz 32Bits
- ▶ High Video Resolution (up to 1080P@30FPS)
- ▶ Symbol rate up to 31.668MBPS
- ▶ Fast USB upgrade (less than 15s, depending on file size)
- ▶ CONFIG DATA function (USB extract, Upload to Modulator)
- ▶ Frequency Range: VHF III(174~233MHZ), UHF (470~858MHZ, 470~790 MHZ, with LTE ON)
- ▶ M.E.R. more than 35dB
- ▶ RF LOOP THROUGH: 50MHZ~2400MHZ
- ▶ 4G - LTE (Long Term Evolution) Filtering switch ON-OFF
- ▶ Modern OLED display 128X32 dots
- ▶ Slim housing (164x106x41 mm)
- ▶ Low power consumption

## HARDWARE

### Technical characteristics

#### ENCODER

##### Processor

- ▶ Host CPU: 200MHZ 32Bits RISC,  
Security Processor : 200Mhz 32Bits,  
Audio Processor: 200MHZ 32Bits

##### Memory

- ▶ RAM DDRII 16bit 512Mbitsx1 (Embedded)
- ▶ Flash NOR Flash 32Mbit x 1

##### Video

- ▶ Video encoder: ISO/IEC 11172-2 MPEG1, ISO/IEC 13818-2 MPEG2 MP@HL, ISO/IEC 14496 MPEG4 compliant Support SP@L3 to ASP@L5, ISO/IEC, 14496-10 AVC, HP@level 4.1, MP@level 4.1, H.263 profile 0, JPEG base-line, progressive.
- ▶ Aspect Ratio: 16:9 wide screen, 4:3 letter box, 4:3 pan scan, support AFD(DTG, MingDTG)
- ▶ Resolution: 1080i, up to 1080p@30FPS

##### Audio

- ▶ Audio encoder: MPEGI layer1/2, MPEGII Layer II AAC LC, HE-AAC v1/V2 (2-CH)

#### MODULATION

- ▶ Output frequency range: 174~233MHZ (VHF III), 470 - 858 / 790 LTE-ON MHz (UHF)
- ▶ Output impedance: 50 [Ω]
- ▶ Input impedance (Loop to Output): 50 [Ω]
- ▶ Forward Error Correction (FEC): 1/2, 2/3, 3/4, 5/6, 7/8
- ▶ Guard Interval: 1/4, 1/8, 1/16, 1/32
- ▶ Constellation: QPSK, 16QAM, 64QAM
- ▶ RF Output Level: Default 90 dbμV, up to +6dbμV (in +2dbμV steps) or down to -14dbμV (in -2dbμV steps)
- ▶ Bandwidth: 7MHZ(VHF), 8MHZ(UHF)
- ▶ FFT: 2K, 8K
- ▶ Reed Solomon: 202, 188, T=8
- ▶ Symbol rate: up to 31.668 MBPS
- ▶ MER: More than 35db

#### TOP SIDE

- ▶ RF Input (LOOP to Output): Impedance: 50 Ohm Input type: F-type female
- ▶ RF Output: Impedance: 50 Ohm Output type: F-type female
- ▶ USB Connector (software upgrade): 1
- ▶ 4G - LTE (Long Term Evolution) Filtering switch: ON/OFF
- ▶ HDMI Input: 1, High Definition Media Interface HDMI V1.4a
- ▶ USB Connector: 1, Type: Host 2.0
- ▶ Power DC Input Connector: X1 DC(12V, 2A)

#### FRONT PANEL

##### Operation display

- ▶ Display: 128x32 dots OLED Display (IIC or SPI communication protocol)

#### LED Indicator

- ▶ Power & work state LED: POWER/LOCKED/SIGNAL Indicator
- #### Buttons
- ▶ Tact switch X6(UP/DOWN/LEFT/RIGHT, MENU, OK: Set Output channel/FEC/CONSTELLATION/FFT/Channel Name etc.

#### POWER SUPPLY

- ▶ Power supply unit type: Adapter Input: 100~240V AC, Output: DC 12V/2.0A
- ▶ Power consumption in normal working mode: < 10W

#### MECHANICAL

- ▶ Dimensions: 164(W)X106(D)X41(H)mm
- ▶ Material and structure: Metal cabinet and 2 layers PCB structure, with heat dispersion outlets

## SOFTWARE

### Technical Characteristics

#### ADJUSTABLE FUNCTIONS

- ▶ Program name
- ▶ Output Frequency: VHF: 174~233MHz; UHF: 470~858 MHz, 470-790 MHz LTE-ON
- ▶ RF output level: Default 90 dbμV, up to +6dbμV (in +2dbμV steps) or down to -14dbμV (in -2dbμV steps).
- ▶ FEC: 1/2, 2/3, 3/4, 5/6, 7/8
- ▶ Constellation: QPSK, 16QAM, 64QAM
- ▶ FFT: 2K, 8K
- ▶ Guard Interval: 1/4, 1/8, 1/16, 1/32
- ▶ Logical Channel Number
- ▶ 6 buttons(Left/Right/Up/Down/OK/Lock): Adjust Output Channel(Frequency)/FEC/Constellation/FFT/Program Name etc.
- ▶ Display setup text messages on OLED: Channel name, Network Name, Program number and above parameters
- ▶ Bandwidth: 7MHz(VHF), 8MHz(UHF)
- ▶ Audio bit rate
- ▶ Video bit rate
- ▶ Audio Format
- ▶ Audio PID
- ▶ Video PID
- ▶ PMT PID

#### SOFTWARE UPGRADE

- ▶ USB: Upgrade Time < 20S, according to the size of the upgrade file
- ▶ CONFIG DATA function (USB extract, Upload to Modulator)

#### SYSTEM SETTINGS

- ▶ Factory reset
- ▶ System version
- ▶ System Boot time: Total: < 20 Seconds
- ▶ Default setting: SID, PID, Video resolution, etc.