

SD ISDB-T MODULATOR GSM-J1

The modulator able to generate a signal in ISDB-T format (Digital Terrestrial Television) from CVBS input.

The modulator is MPEG-4/H264 encoding, ISDB-T modulation integrated device to convert CVBS signal to ISDB-T RF out. It has equipped with one channel CVBS input and one ISDB-T RF out.

The modulator adjusts the compression rate to the available bandwidth, using the modulation ISDB-T parameters.



Features

- ISDB-T(ARIB STD-B31 v1.6) Compliant transmitter for Digital Terrestrial Television
- No hierarchical transmission
- Configurable code Rates : 1/2, 2/3, 3/4, 5/6, 7/8
- QPSK/ 16 QAM/ 64 QAM symbol Mapping
- Configurable support for 2K, 4K and 8K FFT
- Configurable Guard Interval : 1/4, 1/8, 1/16, 1/32
- Support Channel Bandwidth 6 MHz
- MER >30 dB
- Carrier Suppression > 40 dB

Specifications

Source input :

- Input Channel : 1
- Video : CVBS
- Video System : NTSC
- Video input level : 1Vpp @ 75 ohms
- Audio input level : 0.5 - 2Vpp @ 10Kohms
- Audio system : 2 x Mono (stereo)
- Bandwidth : 20 Hz to 20 KHz

Compression :

- Video : MPEG2 MP@ML
- Video Resolution : 720 x 480 (30fps) (NTSC)
- Video Bit rate : 6Mbps@64 QAM / 160QAM
3Mbps@ QPSK
- Audio : MPEG -2 AAC
- Audio Bit rate : 96 - 384 Kbit/S
- DVB insertion tables : SDT, NIT
- Editable field : Service Name, network_id, NIT

Modulation

- Standard : ISDB-T(ARIB STD-B31 v1.6)
- Constellation : QPSK, 16QAM, 64QAM
- Guard Interval : 1/4, 1/8, 1/16, 1/32
- Code Rate : 1/2, 2/3, 3/4, 5/6, 7/8
- FFT Carrier Mode : 2K, 4K, 8K
- Bandwidth : 6 MHz

RF Output

- Type : 1 Multiplex ISDB-T with a digital TV service
- Frequency : VHF:1-12/ UHF :13-62
- MER : >30 dB
- Output level : 100 dBuV
- Attenuation : -10 dB
- Attenuation step : 1dB per step

Connections

- Video : RCA female (yellow)
- Audio, L/R : RCA female (L : white, R : red)
- RF Output : 1 ISDB-T RF output with type F female
- SD : S/W Update

Power Supply : 6W @ 5V

Display : LCD panel @ 2 x 16 characters (on front panel).

Configuration : 6 Local keys on front panel :

- OK Key : Select parameter, or menu
- L / R Keys : Move menu, or characters
- Up / down : Select value of the figure, or field. menu keys : Select menu

Environmental for operating

- Temperature : 5°C- 40°C
- Relative Humidity : 80% @ 30°C

