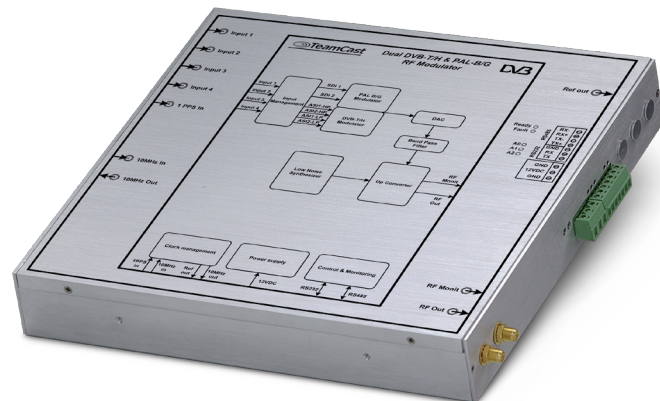


MOD-2210

Dual DVB-T/H and PAL-B/G Modulator

The high performance OEM modulator dedicated to dual digital and analogue broadcasting applications for:

- High performance PAL-B/G transmitters,
- Dual PAL-B/G and DVB-T/H transmitters,



Key features:

- Software selectable operating mode: PAL-B/G or DVB-T/H
- Software selectable SDI inputs or ASI inputs
- Primary and secondary input management (redundancy)
- Fully digital modulation with premium performance
- Mono, dual or stereo audio mode
- Non-linear and linear pre-correction circuits for PAL-B/G and DVB-T/H operation

Description

The MOD-2210 is the most integrated and cost effective dual analogue and digital modulator in the OEM market. It provides the opportunity for transmitter manufacturers and system integrators to rapidly launch their own product range for both analogue PAL-B/G and digital DVB-T/H broadcasting. The MOD-2210 has digital input streams (TS for DVB-T/H and SDI for PAL-B/G) and outputs RF in the VHF/UHF bands.

Performance & Reliability

The MOD-2210 modules include all of the latest state-of-the art technology for digital modulation. They provide designers with best of class performance, including a high MER value and excellent shoulder levels for DVB.

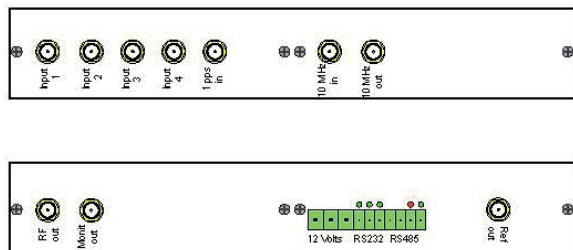
Operating in PAL-B/G mode, the MOD-2210 provides high Signal-To-Noise ratio, extremely low differential gain and phase, as well as very stable audio frequency response. Simple to use linear and non-linear digital pre-correction circuits are incorporated to compensate for the output filter and power amplifier characteristics.

MOD-2210

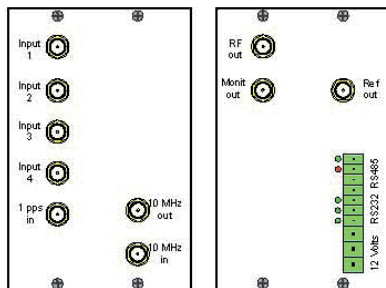
Dual DVB-T/H and PAL-B/G Modulator

Connectors

MOD-2210 Size A



MOD-2210 Size B



Specifications¹

- **Standards**
 - o DVB-T/H: EN 300 744, ETSI TS 101 191, EN 302 304
 - o DVB-ASI: EN50083-9, ETSI TR101 891
 - o PAL-B/G: ITU-R BT.470-7
 - o SDI: ITU-R BT.601-4, ITU-R BT.656-4, SMPTE 259M
- **MPEG-TS Inputs (DVB-T/H mode)**
 - o 4 x ASI, 188/204 bytes - SMA 75Ω
 - o Burst or packet mode - 80 Mbps maxi.
- **SDI Inputs (PAL-B/G mode)**
 - o 2 x SDI with embedded audios - SMA 75Ω
 - o 270 Mbps max, 8 or 10 bits format.
- **RF Output**
 - o VHF III, UHF IV and V
 - o 0 dBm - 50 Ohms (Attenuation from 0 dB to -10 dB)
 - o Channel bandwidth: 5, 6, 7 or 8 MHz
 - o Spurious: >60 dB
- **Clock and Synchronization**
 - o High performance OCXO
 - o 10 MHz & 1 PPS (DVB-T/H)
 - o Black burst reference output (PAL B/G)
- **PAL-B/G video technical specifications**
 - o Differential gain: < 1%
 - o Differential Phase: < 1 degree
 - o Signal-To-Noise: > 60dB weighted
- **PAL-B/G AUDIO technical specifications**
 - o Selectable mode: single, dual audio or stereo
 - o Signal-To-Noise > 60 dB
 - o Distortion < 1%
 - o Audio deviation +/- 50kHz
 - o Frequency response +/- 0.5 dB (40Hz to 15KHz)
- **Pre-correction circuits**
 - o Linear pre-correction: Magnitude and group delay
 - o Non-linear pre-correction: Amplitude and Phase
- **Control & Monitoring**
 - o RS-232C & RS-485
- **Physical**
 - o Single power supply voltage: 12 VDC
 - o 220 x 220 x 35 mm (size A)
 - o 220 x 110 x 70 mm (size B)
 - o Temperature range: 0°C to 50°C

Ordering Information

xTTM-MOD0-2210

Dual DVB-T/H and PAL-B/G Modulator - VHF/UHF output - Size A Module

¹ Specifications are not contractual and are subject to revision without notice.