T-Mod T/T2

The high performance modulator dedicated to DVB-T2 transmission for:
- DVB-T2 trial networks,
- Laboratory experiments.

High level of performances to meet broadcasters’ requirements
Future proof platform to support evolution of the standard

Key features:
- Dual DVB-T and DVB-T2 modulation
- System A and System B (T2-MI) stream input
- MFN and SFN operations
- Extremely high modulation performance
- Very stable and low noise oscillator (OCXO)
- Level output range from -20 dBm to -100 dBm
- Frequency output range from 30 MHz up to 900 MHz
- MISO

Description

T-MOD T/T2 is an innovative solution which provides best of class signal performance for DVB-T2 modulation or DVB-T modulation. More widely, T-Mod T/T2 addresses the applications and needs of all players in the R&D laboratories, system integrators and manufacturers, who are already experimenting with this new standard.

Performant & Future proof

T-Mod T/T2 has been specially developed to provide equipment designers, R&D laboratories designers, with a best of class performance, and to exhibit a high MER value, excellent shoulder levels and lowest phase noise. It includes all the necessary clock and synchronization mechanisms required to operate DVB-T2 and DVB-T transmissions in Single Frequency Mode (SFN) & MISO applications (DVB-T2). A comprehensive & intuitive control software suite is provided to configure and control the unit via Ethernet local or remote connection. T-Mod T/T2 consists of a stand-alone modulator rack, with interface ASI Transport Streams ports. It is capable of delivering a RF signal output over a wide frequency band from 30MHz up to 900MHz.
The dual modulation allows to compare the performance of the DVB-T2 versus DVB-T by using only one modulator.
T-Mod T/T2
DVB-T/T2 Modulator

Connectors

Specifications

- **DVB-T2 Standards**
  - DVB-T2: EN 302 755, TS 102 831, TS 102 773 (T2-MI)
  - DVB-T: EN 300 744, TS 101 191, TR 101 190

- **TS Stream Inputs**
  - 2 x ASI - BNC connector - 75 Ω
  - 188/204 bytes (RS decoder)
  - Packet/burst mode – 60 Mbps max.

- **RF Outputs**
  - From 30 MHz to 900 MHz (-20 dBm to -100 dBm)
  - N connector - 50 Ω
  - 5, 6, 7 or 8 MHz bandwidth
  - Low level (-20 dBm) output available for monitoring
  - SMA connector - 50 Ω

- **Clock and Synchronization**
  - High quality internal clock (OCXO)
  - 10 MHz & 1 PPS inputs

- **Modulation**
  - Test modes: PRBS, Sinus, Spectrum-Gap and Null symbol insertion
  - MFN and SFN network operation
  - High MER performance (> 40 dB measured)
  - Low shoulder level (> 48 dB measured)

- **Control & Monitoring**
  - 1 x 10/100 base-T Ethernet port
  - Delivered with control software suite/Touch Screen Control

- **Physical**
  - Dimensions: 450 x 500 x 44 mm
  - Weight: 3.300 kg
  - Operating temperature range: 0 °C to 50 °C
  - Power supply: 90 to 240 VAC – 50 Hz – 100 W

Ordering Information

**TMR-TMOD-BT20**
DVB-T/T2 Modulator rack with RF output
Delivered with control software suite and Touch Screen Control Unit

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