**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) & DVB-T2 MISO applications. 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 bandwith
  - 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)
  - DVB-T
    - DVB-T all modes supported (except hierarchical)
    - Constellation: QPSK, 16QAM, 64QAM
    - FFT: 2k, 4k, 8k
    - Guard Intervals: 1/32, 1/16, 1/8, 1/4
    - FEC: 1/2, 2/3, 3/4, 5/6, 7/8
  - DVB-T2
    - Single stream modulation (System A or System B)
    - Constellation: QPSK, 16QAM, 64QAM, 256QAM (normal or rotated)
    - FFT: 1k, 2k, 4k, 8k, Extended 8k, 16k, Extended 16k, 32k, Extended 32k
    - Guard Intervals: 1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4
    - FEC: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6
    - Adjustable Time Interleaving
    - MISO

- **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.