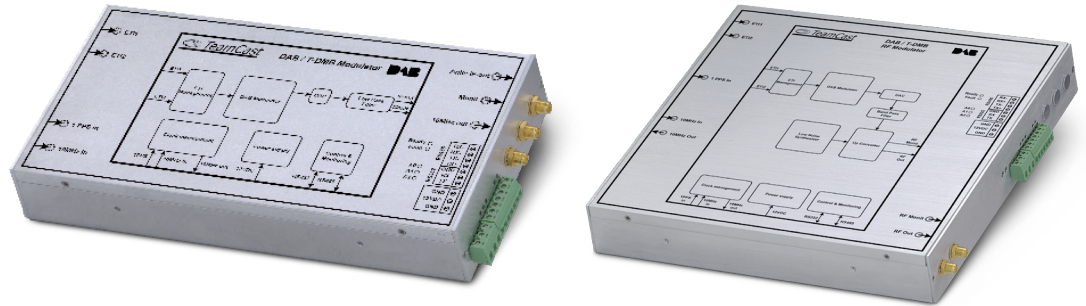


MAB 1000/MAB-2000 DAB/T-DMB Modulator

The high performance OEM modulator dedicated to DAB/T-DMB applications for:

- DAB/T-DMB transmitters
- Integrated test systems
- R&D experimentation



Key features:

- Fully compliant with DAB/T-DMB standards (EN 300401/ETS 300 799)
- Efficient ETI input management for redundancy
- MFN and SFN operation
- Very high modulation performance (signal stability, shoulder level, low phase noise)
- Linear and Non-Linear Digital Pre-correction
- Compact size for easy OEM integration (three size form factors available)
- Single 12 V power supply

Description

The MAB-1000/2000 is the most integrated and cost effective DAB/T-DMB modulator for addressing the OEM market. It provides the opportunity for transmitter manufacturers as well as for system integrators to launch their own product range for DAB and T-DMB markets.

Fastest Time to Market

As with all TEAMCAST modules, the MAB-1000/2000 products consists of a compact and powerful unit, especially designed and developed for fast integration. Designers can elect to manage the TEAMCAST module by using the open and easy to use serial protocol, or to develop their own GUI for control as required.

Performance&Reliability

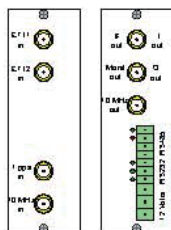
MAB-1000/2000 modules include all the state-of-the art technological features for DAB/T-DMB modulation. They provide designers with a best of class performance, providing a high quality signal modulation with excellent shoulder levels and lowest phase noise. Easy to use linear and nonlinear digital pre-correction circuits are incorporated to compensate for output filter and power amplifier characteristics, if required. The products fulfils both transmitter manufacturers' and system integrators' requirements producing reference test systems for the DAB/T-DMB standards.

MAB-1000/MAB-2000

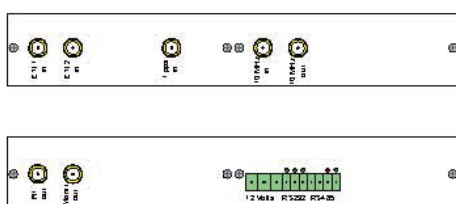
DAB/T-DMB Modulator

Connectors

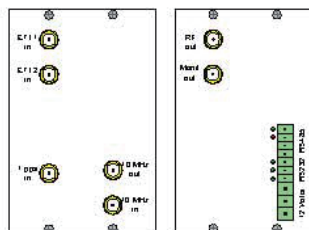
MAB-1000



MAB-2000 Size A



MAB-2000 Size B



Specifications¹

■ ETI Inputs

- o 2 x ETI NI or NA (auto detect) inputs compliant with G703 / G704 standards
- o Seamless automatic switching

■ Outputs

- o 30 to 40 MHz analogue IF output with 1 Hz step (0 dBm-50 Ω) (MAB-1340)
- o Output frequency range 174.928 MHz to 239.200 MHz (0 dBm -50 Ω) (MAB-2020)
- o Output frequency range 1452 MHz to 1492 MHz (-10 dBm - 50 Ω) (MAB-2050)

■ Clock and Synchronization

- o High Quality internal clock
- o 10 MHz and 1 PPS external reference for SFN operation
- o 10 MHz output available

■ Modulation

- o All DAB modes supported (Modes I, II, III, IV) with all protections files
- o Dynamic reconfiguration

- o MFN or SFN network operation
- o High performance MER
- o Adjustable Crest Factor (PAPR)

■ Digital Pre-correction

- o Non-Linear Digital Pre-correction over a 4.6 MHz bandwidth
- o Amplitude and phase correction for digital linear pre-correction
- o Correction tables loaded through control port

■ Control & Monitoring

- o RS232 x RS485 control ports with ASCII protocol

■ Physical

- o Supply voltage (12 VDC)
- o MAB-1000 (IF): 220 x110x35 mm
- o MAB-2000 (RF): 220 x220x35 mm (size A) 220 x110x70 mm (size B)
- o Operating temperature range: 0° to 50 °C

Ordering Information

xTTM-MAB0-2020

DAB/T-DMB Modulator - VHF output - Size A Module

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