

MediaFLO™ Modulator

MFL-1000/MFL-2000:

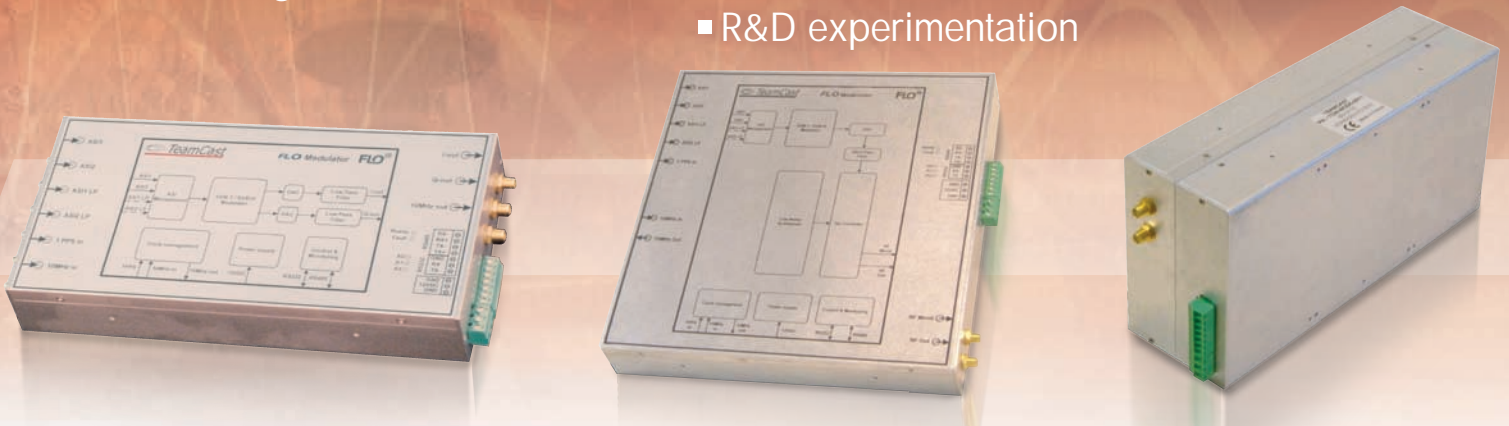
The high performance OEM modulator dedicated to MediaFLO™ applications for:

- MediaFLO™ transmitters
- Integrated test systems
- R&D experimentation

Compact size

Fast time to market

**High performance
and reliability**



Description

Get ready for the MediaFLO™ market now! The MFL-1000/2000 is the most integrated and cost effective MediaFLO™ modulator for addressing the OEM market. It provides the opportunity for transmitter manufacturers as well as for system integrators to launch rapidly their own product ranges for this new emerging multimedia technology.

Fastest Time to market

As with all TEAMCAST modules, the MFL-1000/2000 products consist of compact and powerful units, 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 as required.

Performance & Reliability

MFL-1000/2000 modules include all the state-of-the-art technological features for FLO™ modulation. They provide designers with a best of class performance, providing a high MER value, excellent shoulder levels and lowest phase noise. Simple to use non-linear digital pre-correction circuits are incorporated to compensate for output filter and power amplifier characteristics, if required. The products fulfills both transmitter manufacturers' and system integrators' requirements producing reference test systems for the new MediaFLO™ standard.

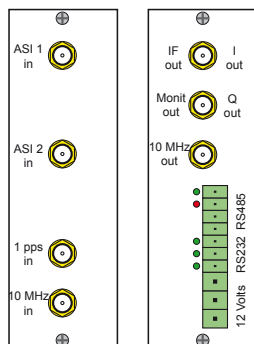
Key Features

- Full compliance with FLO™ technology (AIS 2.0)
- Efficient TS input management for redundancy
- Very high modulation performance (MER, RF stability, shoulder level, low phase noise)
- Optional onboard GPS
- High reliable SFN operating
- Linear and Non-linear digital pre-correction circuits
- Compact size for easy OEM integration (three size form factors available)
- Single 12V power supply

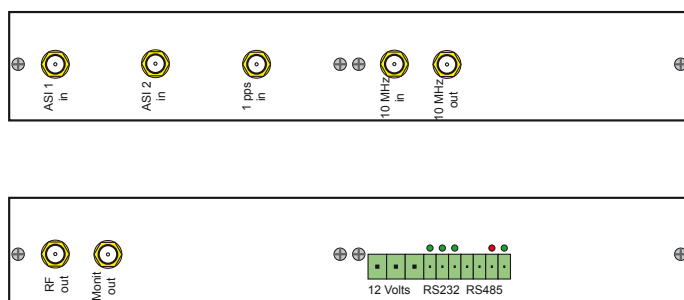
MediaFLO Modulator

Connectors

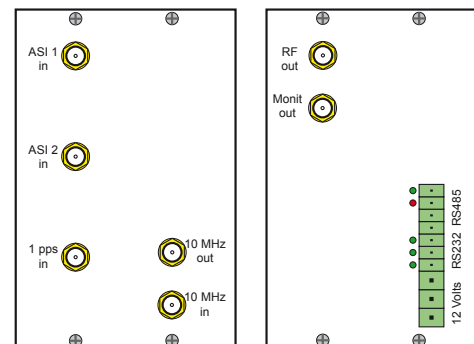
MFL-1000



MFL-2000 Size A



MFL-2000 Size B



Specifications

Standards

- o FLO™ Air Interface Specification (AIS 2.0)
- o FLO™ Transmitter Minimum Performance Specification

MPEG-TS Inputs

- o 2 x ASI
- o 188/204 bytes

IF/RF Output

- o IF from 30 MHz to 45 MHz (MFL-1000)
- o RF from 30 MHz to 860 MHz (MFL-2000)
- o 0 dBm – 50 Ohms (Attenuation from 0 dB to -10 dB)
- o Channel bandwidth: 5, 6, 7 or 8 MHz
- o MER > 45 dB (predicted)
- o Shouders ⁽¹⁾ > 50 dB

Clock and Synchronization

- o High quality OCXO
- o 10 MHz & 1 PPS
- o Optional onboard GPS

Modulation

- o OFDM modulation – 4096 sub-carriers
- o QPSK / 16 QAM

FEC

- o OUTER: Reed Solomon
- o INNER: Turbo code rates 1/2, 1/3 or 2/3
- o Physical layer data rates ⁽¹⁾:
from 2.33 Mbps up to 14.93 Mbps
- o Transmit modes: 0 to 11

Control & Monitoring

- o RS-232C & RS-485

Physical

- o Single supply voltage (12 VDC)
- o MFL-1000 (IF): 220 x 110 x 35 mm
- o MFL-2000 (RF): 220 x 220 x 35 mm (size A)
220 x 110 x 70 mm (size B)
- o Temperature: 0°C to 50°C

Ordering Information

TCM-MFLO-1340	FLO Modulator with 30-45 MHz IF Out
TCM-MFLO-2010	VHF/UHF FLO Modulator
TCM-MFLO-2012	VHF/UHF Modulator and onboard GPS

⁽¹⁾ Depending on channel bandwidth