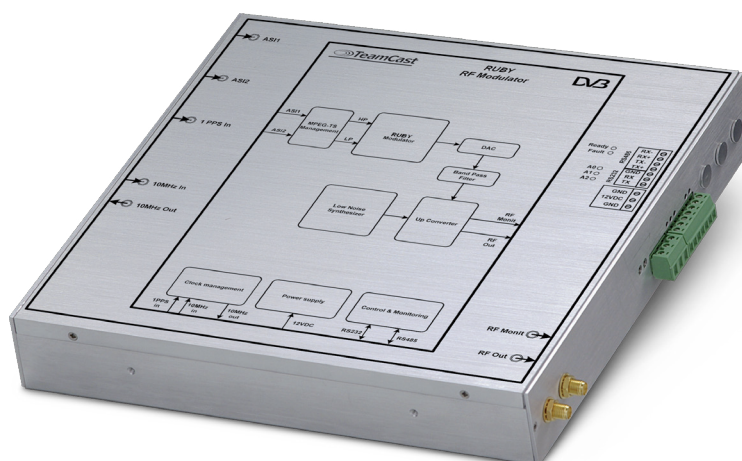


MNGO-2000

RUBY Modulator

The high performance OEM modulator dedicated to Video Links applications, with the advantage of a:

- Most advanced and proven transmission for wireless links (RUBY)
- High performance and Reliability
- Cost effective solution
- Fast time to market
- Compact size



Description

The MNG-2000 is the most advanced and powerful OFDM based transmission solution addressing the Video Links needs. It especially provides the capability for Video Links system manufacturer to design and to market new transmission solution for better link performances in mobile environment.

With the launch of the MNG-2000 product range, TeamCast addresses the demand from Video Link service operators for more robust transmission link, especially running in mobile environment conditions. Up to now, most of the current solutions on the market suffer from lack of robustness against Doppler effect as well as against signal fading, that usually occur during transmission in shadowed or in tree environment.

High performance & Reliability

MNG-2000 modules include all the state-of-the-art technological features for RUBY 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 and linear digital pre-correction circuits are incorporated to compensate output filter and power amplifier characteristics, if required. The product fulfils requirements producing the highest quality for RUBY transmission.

RUBY Advantages

The RUBY modulation includes all benefits of the DVB-T. This standard is especially developed for harsh environment in video links transmission like signal fading, echoes and trees. The signal to noise ratio required is lower thanks to Turbo Code forward error protection. The Doppler frequency can be twice more than DVB-T due to the configurable time interleave.

Fastest Time to market

As with all TeamCast modules, the MNG-2000 products comprise of compact and powerful OEM units, designed and developed for fast integration. Designers can elect to manage the TeamCast module by using the open and simple serial protocol or to develop their own GUI as required.

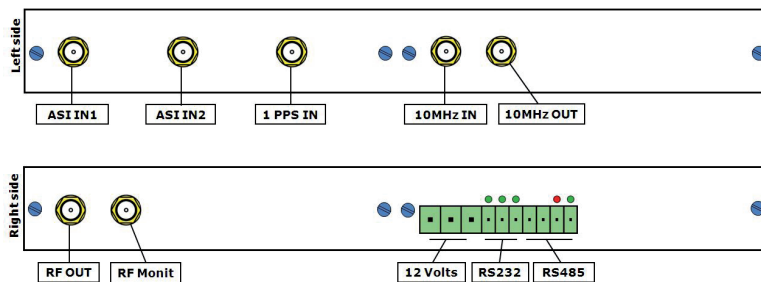
Key features :

- Proven RUBY operating
- Very high modulation performance (MER, RF stability, shoulder level, low phase noise)
- 1, 7, 5, 6, 7 and 8 MHz channels bandwidth
- Compact size for easy OEM integration
- Single 12V power supply

RUBY Modulator

MNGO-2000

Connectors



Specifications¹

■ Standards

- o DVB-ASI EN 50083-9, ETSI TR 101 891
- o MPEG-TS ISO/IEC 13818-1

■ MPEG-TS Inputs

- o 2 x ASI connectors
- o 188/204 bytes, bit rate adaptation and PCR restamping
- o Automatic input switching for redundancy

■ RF Outputs

- o RF from 30 MHz to 900 MHz (0 dBm - 50 Ω) - (MNGO-2010)
- o RF from 2.4 GHz to 2.7 GHz (-10 dBm - 50 Ω) - (MNGO-2080)
- o Low level (-20 dB) output available for monitoring

■ Modulation

- o RUBY multi-carrier modes
- o FTT size: 2k, 4k and 8k carrier
- o 3GPP2 Turbo-codes encoding
- o Adjustable time interleave

- o 1.7, 5, 6, 7 or 8 MHz bandwidth
- o High performance MER
- o Low shoulder levels

■ Clock & Synchronization

- o High quality internal clock
- o 10 MHz & 1 PPS

■ Physical

- o Supply voltage: 12 VDC
- o ASI and RF: SMA connectors
- o Compact aluminium package with very low thermal resistance (220 x 220 x 35 mm)
- o RS-232 & RS-485 control port with ASCII protocol
- o Operating temperature range: 0°C to 50°C

Ordering Information

xSWM-MNGO-2010

RUBY modulator - 100 MHz to 900 MHz output

xSWM-MNGO-2080

RUBY modulator - 2.4 GHz to 2.7 GHz output

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

* Others frequency are available on request.