

# DVB-T/H Diversity Demodulator

**Cost-effective solution**

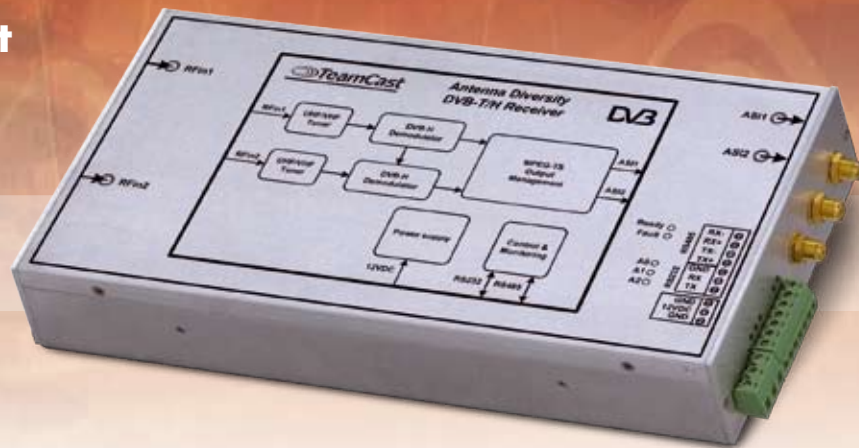
**High Performance and Reliability**

**Fast time to market**

**Compact size**

## **RXH-1000:**

The high performance OEM demodulator dedicated to Monitoring and ENG<sup>(1)</sup> purposes



## **Description**

The RXH-1000 is a cost effective DVB-T/H professional demodulator, addressing the OEM market. It has been especially designed to operate in difficult reception environments with multipath echoes, noisy channels and Doppler effect. The RXH-1000 can be configured as a diversity demodulator or as a double-channel receiver to address multiple application fields.

### **High Performance & Reliability**

Based on a powerful DIBCOM chip, RXH-1000 includes all state-of-the-art technological features for DTV demodulation, providing high input sensitivity<sup>(2)</sup> and robustness against noise and Doppler effect. The MRC (Maximum Ration Combining) algorithm ensures service continuity thanks to a decision mechanism that computes each of the COFDM carriers.

### **Fastest Time to market**

As with all TEAMCAST modules, the RXH-1000 product 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 simple serial protocol, or to develop their own GUI as required.

### **Compact size**

RXH-1000 integrates a dual receiving chain (double tuner + double demod.) that supports all DVB-T/H modes with several channel bandwidths. The RXH-1000 small size eases its integration within DVB-T/H transmitters, monitoring systems, or ENG<sup>(1)</sup> solutions.

## **Key Features**

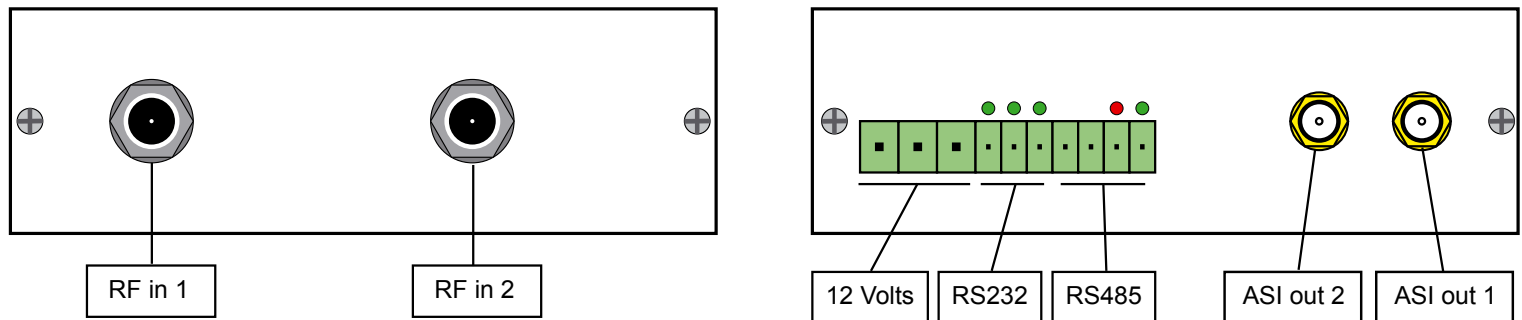
- Antenna diversity DVB-T/H demodulator
- All DVB-T/H modes supported
- 1.7, 5, 6, 7 and 8 MHz channels in VHF and UHF
- 4 operating modes: dual channel, antenna diversity, hierarchical demodulation redundant demodulation
- Monitoring features (MER, BER, RF level, C/N+I, etc.)
- MRC (Maximum Ration Combining) algorithm
- Compact size for easy OEM integration
- Single 12V voltage supply

<sup>(1)</sup>ENG: Electronic News Gathering

<sup>(2)</sup>Better than Nordig II figures

# DVB-T/H Diversity Demodulator

## Connectors



## Specifications

- **RF Inputs**
  - o VHF Band III (Ch 5 to 12) and UHF band IV & V (Ch 21 to 69)
  - o 1.7, 5, 6, 7 and 8 MHz RF channels
  - o Min. Input level : - 95 dBm\*
- **Demodulator**
  - o Embedded Dibcom chip, optimized for multipath channels
  - o All DVB-T/H modes supported, including hierarchical ones
- **Operation modes**
  - o Dual channel: the module is used as a double receiver running independently
  - o Antenna diversity: the 2 demodulators are cascaded together bringing an improvement around 6 dB and doubling the maximum speed of reception
- o Hierarchical: the module demodulates simultaneously the LP & HP data streams
- o Redundant: the module demodulates 2 RF channels and selects either manually or automatically the best receiving channel
- **MPEG-TS Outputs**
  - o 2 x ASI outputs for RXH0 reference (Compliant with EN50083-9)
  - o 1 x SPI output (MPEG-TS parallel interface) for the RXH1 reference
- **Control & Monitoring**
  - o RS232 & RS485 control port with ASCII protocol
- **Physical**
  - o Supply voltage: 12 V
  - o Compact aluminium package (220 x 110 x 35 mm) with very low thermal resistance
  - o Operating temperature range: 0°C to 50°C

## Ordering Information

TCM-RXH0-1020	DVB-T/H antenna diversity demodulator, ASI out
---------------	--

\* QPSK - CR 1/2 -  $\Delta$  1/8 - 8 Mhz - 8 K