The high performance OEM demodulator diversity 4 dedicated to wireless transmissions in harsh environment, with the advantages of a:

- High Performance and Reliability
- Fast time to market
- RUBY Enhanced COFDM diversity 4 demodulation
- Compact size
- Cost effective solution

Description

RNG is a cost effective RUBY diversity 4 professional demodulator, addressing wireless links market. It has been especially designed to operate in difficult reception environment with multipath echoes, noisy channel and Doppler effect. RNG can be easily integrated into a four antenna receiving station to ensure a 360° degree coverage with continuous signal decoding (no antenna-switching). RNG offers the opportunity to implement the receiver into a network. The requirements for streaming real-time dataflow can be easily met. This versatile receivers interface with any network standard (Ethernet, 3G, WLAN ...) and replace the need for expensive, proprietary solutions.

High performance & Reliability

RNG includes all the state-of-the-art technological features for RUBY demodulation, providing high input sensitivity and robustness against noise and Doppler effect. The MRC (Maximum Ratio Combining) algorithm ensures service continuity thanks to an algorithm that computes each of the COFDM carriers.

RUBY Advantages

RUBY is a OFDM technology designed by TeamCast especially robust for wireless transmissions in harsh environment. TeamCast was pioneer in providing OEM solutions for wireless transmissions based on OFDM / DVB-T. Nevertheless, based on its analysis of the specific phenomenons in this kind of applications, TeamCast has developed a more flexible waveform called Ruby. Thanks to Ruby, the performances of your systems are simply doubled!

Fastest Time to market

As with all TeamCast modules, the RNG product consists of a compact and powerful unit, especially designed and developed for fast integration. The advance IP control permits to monitor the input signal level, Signal to noise ratio, and indicative MER.

Compact size

The RNG integrates a four channels receiving process that supports all RUBY modes with several channel bandwidths. The RNG2-3x40 small size ease its integration monitoring system or solutions for Electronic News Gathering.
RNG
4-Way RUBY COFDM Diversity Demodulator

Connectors (RNG2-3140)

Specifications

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

- RF Inputs
  - 4 x antenna inputs
  - SMA - 50 Ω connectors
  - Center frequency: 50 MHz to 900 MHz
  - Up to 16 MHz bandwidth
  - Min. Input level: -97 dBm

- Demodulation
  - 8 and 16 MHz channel bandwidth**
  - COFDM 2k, 4k and 8 k carriers
  - Auto-detected transmission mode (based on TPS)
  - Diversity algorithm: True Maximum Ratio Combining
  - State-of-the art doppler compensation
  - Up to 50 Mbps
  - Transport of MPEG-TS or Ethernet stream

- MPEG-TS Outputs
  - 2x ASI

- Ethernet Output
  - 10/100/1000 Base-T Ethernet port
  - Ethernet (need to be associated to MNG2-3000)

- Monitoring figures
  - Input signal level
  - Signal to noise ratio (C/N + I)
  - Signal performance (indicative MER)
  - Error rate measurement (BER & Packet error count)

- Physical
  - Supply voltage: 12VDC or 10-36 VDC
  - ASI and RF: SMA connectors
  - Compact aluminium package with very low thermal resistance:
    - RNG2-3040: 220 x 220 x 55 mm with fans
    - RNG2-3140: 220 x 110 x 55 mm with fans
  - IP control port (embedded Web Browser)
  - Operating temperature range: 0°C to 50°C

Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSWM-RNG2-3040</td>
<td>DIV4 - RUBY demodulator, 50/900 MHz In, ASI &amp; IP Out, IP Ctrl, 10-36 V DC, size A</td>
</tr>
<tr>
<td>XSWM-RNG2-3140</td>
<td>DIV4 - RUBY demodulator, 50/900 MHz In, ASI &amp; IP Out, IP Ctrl, 12 V DC, size C</td>
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*S Specifications are not contractual and are subject to revision without notice.

* Others frequency on request.

** Others bandwidth on request.