

RD1100

RECEIVER DESCRAMBLER



THE RD1100 RECEIVER DESCRAMBLER IS PERFECTLY DESIGNED TO MEET THE DIGITAL TURNAROUND REQUIREMENTS OF THE CONTRIBUTION AND DISTRIBUTION MARKETS

The RD1100 is the latest generation of Integrated Receiver Descrambler solution to join Thomson Video Networks' RD series portfolio.

The RD1100 offers professional quality reception and descrambling performance and a cost-effective solution for single-transponder, multi-service descrambling or single-channel digital turnaround applications:

- » Terrestrial headend
- » Cable headend
- » Satellite headend
- » IPTV headend

Designed for Digital Turnaround

The RD1100 features all the inputs you need to support a wide range of transmission media.

These include:

- » DVB-S/S2 satellite input
- » Dual IP gigabit Ethernet input
- » ASI input
- » DVB-T/T2 terrestrial input
- » 8VSB terrestrial input
- » ISDB-T terrestrial input
- » DVB-C/C2 cable input

The RD1100 supports automatic input redundancy to enhance system robustness. In the event of input signal failure, the receiver automatically switches to a designated backup feed.

The RD1100 features both ASI and dual IP gigabit Ethernet outputs (with SMPTE 2022 FEC generation) to stream the descrambled transport stream.

Thanks to its PID/Service filtering feature, the RD1100 allows delivering the entire transport stream or only a subset of selected services. Up to ten different MPTS or SPTS can be managed in the same time.

Versatile Applications

The RD1100 is the perfect bridge between networks to feed transponders, remultiplexers, decoders and any other video processing devices.

When free-to-air feeds are received (no descrambling required), the RD1100 can be used as a simple demodulator or interface converter:

- » RF to IP
- » RF to ASI
- » ASI to IP
- » IP to ASI

Descrambling

When scrambled feeds are received, the RD1100 offers configurable single- and multi-service descrambling (with flexible per-PID/service configuration).

The descrambler natively embeds a dual DVB-CI interface accepting Conditional Access Modules (CAM) from all major CAS vendors.

It also implements BISS mode-1/E descrambling supporting up to 12 different keys.

Multi-service and BISS descrambling are both software options (no additional hardware required). The RD1100 is therefore tailored to users' precise needs and offers future-proof deployments, thereby reducing operator CAPEX.

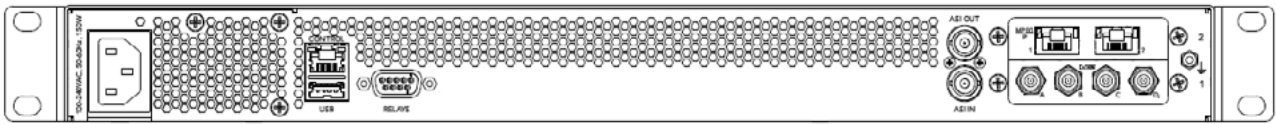
Easy to Operate

The RD1100 offers a Web interface supported by all major browsers and a front panel for local and remote control/supervision.

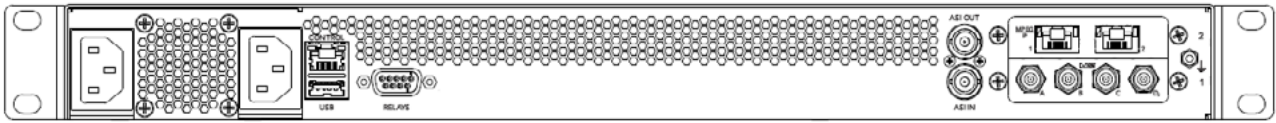
The RD1100 also embeds an SNMP agent for centralized management system integration.

key features

- » Single TS reception and descrambling
- » Descrambling density
 - Single service
 - Multi service (optional)
- » Descrambling configuration flexibility
 - per service
 - per PID
- » PID/Service filtering
- » DVB-CI (for CAM)
 - 2 x DVB-CI slots
 - Number of services depending on CAM module and CAS vendor
 - Major CAS vendor support (Viaccess, Nagravision, Irdeto, and more)
- » BISS
 - Mode 1 and E
 - Up to 12 independent BISS keys
- » Input redundancy
- » ASI input/output
- » Dual IP input/output (SMPTE 2022 FEC)
- » Quad DVB-S/S2 input (up to 32APSK)
- » DVB-T/T2 input
- » 8VSB/QAM-B input
- » ISDB-T input
- » DVB-C/C2 input



RD1100 Single AC PSU



RD1100 Dual AC PSU

technical specifications

TS Input Interfaces

For 8VSB/ISDB-T/DVB-C/C2 input, contact Thomson.

ASI Input

- › 1 x 75Ω BNC
- › Max rate: 200 Mbps

IP Input

- › 2 x RJ45 (shared with IP out)
- › 10/100/1000 auto-negotiate
- › UDP or RTP

› Multicast or Unicast

› CBR or null-stripped

› Max rate: 200 Mbps

› SMPTE 2022 FEC correction

› IGMP v1/v2/v3

DVB-S/S2 Input

- › 4 x 75Ω F-type (one active)
- › Frequency: 950 – 2150 MHz
- › Symbol rate: 1 – 60 Msps
- › DVB-S QPSK (all FEC rates)
- › DVB-S2 QPSK, 8PSK, 16APSK and 32APSK (all FEC rates)
- › CCM and VCM
- › Multi-stream (single ISI)
- › LNB control (VDC/22 kHz)

TS Input Interfaces (cont.)

DVB-T/T2 Input

- › 1 x 75Ω F-type
- › Frequency: 42 – 1002 MHz
- › QPSK, 16QAM, 64QAM and 256QAM
- › Bandwidth: 1.7, 5, 6, 7 and 8 MHz
- › MER: 0 to 40 dB
- › Multi-PLP

TS Output Interfaces

ASI Output

- › 1 x 75Ω BNC
- › Max rate: 200 Mbps

IP Output

- › 2 x RJ45 (shared with IP in)
- › 10/100/1000 auto-negotiate
- › UDP or RTP
- › Multicast or Unicast
- › Max rate: 200 Mbps
- › SMPTE 2022 FEC generation

Descrambling

Flexible per-PID/service configuration

BISS

- › BISS-1/E (injected ID)
- › Up to 12 separate keys

DVB-CI

- › 2 x DVB-CI slots
- › Single/Multi service

Processing

PID/Service filtering

- › Up to 10 SPTS/MPTS generation
- › Automatic table update

Control and Supervision

- › Web GUI for remote control
- › SNMP agent
- › 3 x relays

Power Supply

- › Single AC PSU
- › Dual AC PSU with two plugs
- › 100 – 240 VAC, 50 – 60 Hz
- › 70 Watt max. (typ. 60 Watt)

Physical Characteristics

- › 1RU x 19", H x W x D = 44 x 437 x 370 mm (1.72 x 17.2 x 14.6 inches)
- › 2.9 – 3.3 Kg (6.5 – 7.25 lbs)

Environmental Conditions

- › Operating temperature: 0° to 50°C (32° to 122°F)
- › Relative operating humidity: 5% to 95% (non condensing)
- › Storage temperature: -40° to 65°C (-40° to 149°F)
- › Relative storage humidity: 5% to 95% (non condensing)

ordering information

Base Units

RD1100-1U-1AC-CI (Single AC PSU)

RD1100-1U-2AC-CI (Dual AC PSU)

- › RD1100 base unit (1RU)
- Single service descrambling
- ASI input/output
- 2 x DVB-CI slots

Hardware Options

RD1100-HW-GIGE-2

- › MPEG over IP input/output
- 2 x GigE ports

RD1100-HW-DVBS2-4

- › DVB-S/S2 input
- 4 x RF inputs - one active
- QPSK, 8PSK, CCM
- LNB power supply

RD1100-HW-DVBT2-1

- › DVB-T/T2 input
- 1 x RF input
- Multiple PLP

Software Options

RD1100-LIC-DSC-MULTI

- › DVB-CI multi-service descrambling license

RD1100-LIC-DSC-BISS

- › BISS -1/E descrambling license
- Single/Multi-service descrambling
- Up to 12 keys

RD1100-LIC-FEC

- › SMPTE 2022 FEC generation license

RD1100-LIC-DVBS2-ADV

- › DVB-S2 Advanced mode
- 16APSK/32APSK
- Multi-stream (ISI selection)
- VCM

RD1100-LIC-FILTER

- › PID/Service filtering license
- Up to 10 MPTS/SPTS

professional services

Our professional services offerings ensure optimal system performance and maximize uptime.

These services include call centers staffed around the clock; system planning, design, and commissioning; professional training courses; and technical maintenance programs and service agreements.

FOLLOW US ON    

thomson-networks.com behindeverscreen.com

© Copyright 2016 - Thomson Video Networks. All rights reserved. All other tradenames referenced are service marks, trademarks, or registered trademarks of their respective companies. Specifications subject to change without notice. CDT-5201D-4

THOMSON

▶ VIDEO NETWORKS

now part of 