Datasheet

CRT1081IRD

CRYPTON COMPACT SIZE 8-CHANNEL INTEGRATED RECEIVER DECODER

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1. Contents

2. Overview

CRT1081IRD is a compact size 8-channel integrated receiver decoder. It combines 8 full featured DVB-S receivers with Common Interface for descrambling services and ASI output interfaces, all in one 1U case. Such a compact and high integrated solution lets you build your network central station with an exceptional efficiency. WEB control interface lets you to control all the system no matter where you are at the moment. Industry standard DVB-ASI output interface makes it easy to serve Digital Video/Audio programs of MPEG2 or H.264 type to DVB multiplexers, IPTV streamers etc.

3. Features

- **8 DVB-S receivers.** Full featured DVB-S receivers. Both MPEG2 and H.264 compression is supported.
- **8 CI Slots.** DVB-CI compatible interfaces to CAM modules for services descrambling.
- **8 DVB-ASI outputs.** EN 50083-9 compatible. 188 byte.
- **TCP/IP connection.** Industry standard TCP/IP interface is used to access the device.
- **Web Interface.** Standard Web interface is used for device control and embedded applications configurations.
- **AC 220V power supply.** 220 power supply source is used for device normal operation.
- **Compact size.** Thanks to its compact size (19" 1U) the device can be easily integrated into the DVB, IPTV or other head ends.
- **Applications.** SMATV, CATV, MMDS, MVDS head ends.

4. General description

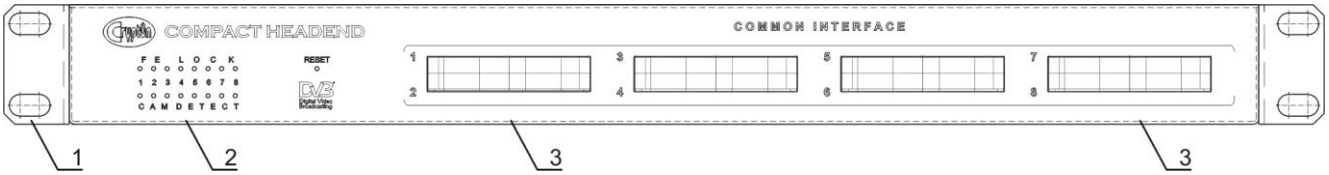

Fig. 1 Front panel

Front panel description

1. Front panel with mounting holes.
2. Leds for tuner lock and CAM module insertion indication.
3. Common Interface slots for CAM modules.

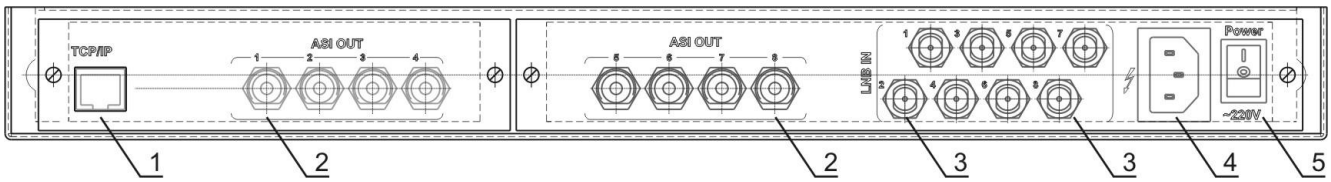

Fig. 2 Rear panel

Rear panel description

1. Ethernet port for device control via TCP/IP;
2. 8 DVB-ASI outputs;
3. 8 DVB-S receiver inputs. IF 950-2150MHz;
4. Power socket;
5. Power switch;

5. Functional block diagram

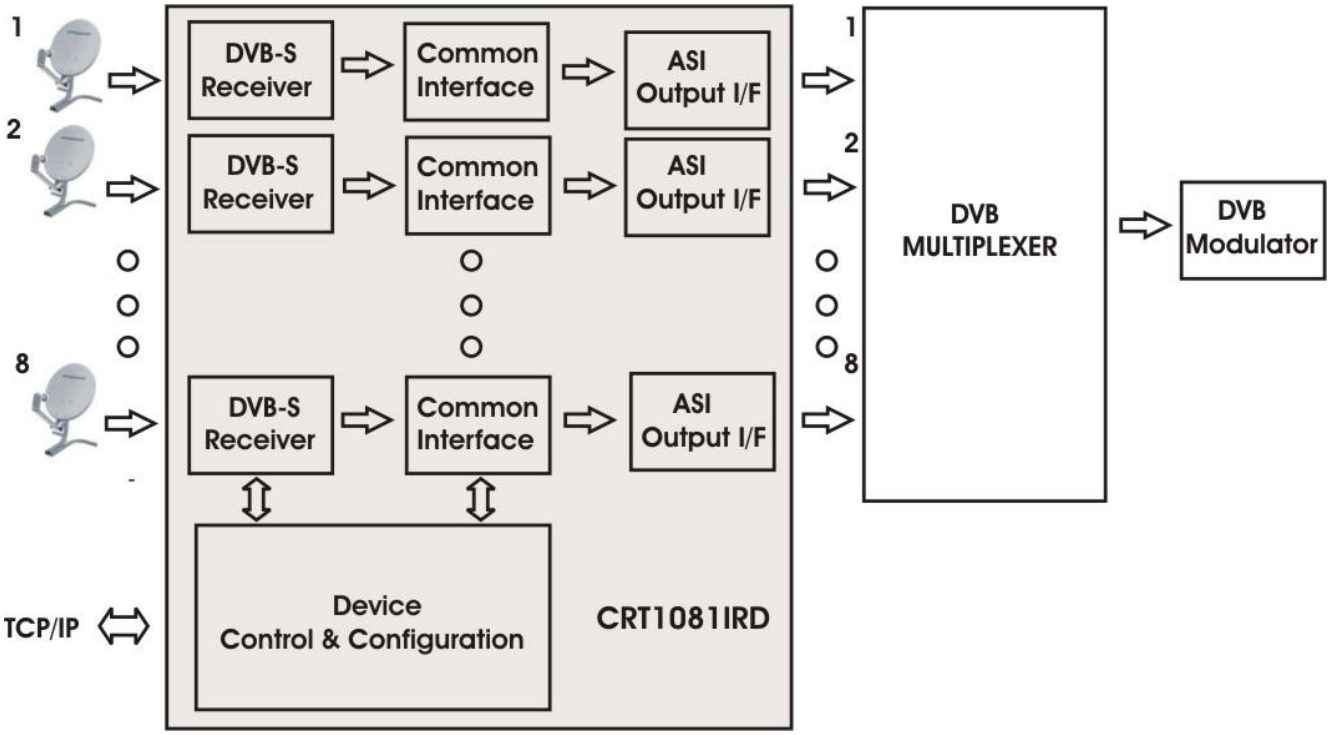

Fig. 3. Functional block diagram of CRT1081IRD

Functional blocks description.

DVB-S receiver. 8 full featured DVB-S receiver blocks take signal from LNBs, demodulate it and route 8 MPTS to Common interface blocks for descrambling or direct to ASI.

Common Interface. 8 Common interface blocks are able to send and receive TS data to/from CAM modules for descrambling services .

ASI output I/F. 8 DVB-ASI output interfaces are used to output TS to a third party equipment.

Device control & configuration. All device control and configuration is made via active TCP/IP connection and use Web Interface technology.

6. Technical specification

DVB-S receiver	
Number of channels	8
Receiving frequency range	950-2150 MHz
Input signal level	-65~-25 dBm
Nominal RF input impedance	75 Ohm
Connector type	IEC, F-type
SR	1-45 MBaud
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Common Interface	
Number of channels	8
Specification	EN50221, ETSI TS 101699
DVB-ASI Output	
Number of channels	8
Specification	EN 50083-9
Output impedance	75 Ohm
Connector type	IEC 169-8, BNC-type
Operation modes	Packet, 188 byte
Maximum output bit rate	213 Mbps

7. Abbreviations

DVB	–	Digital Video Broadcasting
DTV	–	Digital Television
SI	–	Service Information
PSI	–	Program Specific Information
QAM	–	Quadrature Amplitude Modulation
QPSK	–	Quaternary Phase Shift Keying
SMATV	–	Satellite Master Antenna Television
CATV	–	Cable Television
MMDS	–	Multichannel Multipoint Distribution System
MVDS	–	Multipoint Video Distribution System
SMS	–	Subscriber Management System
SR	–	Symbol Rate
FEC	–	Forward Error Correction