

# *Datasheet*



## ***CRT1081IRD-S2-IP*** ***Compact Size 8-channel Integrated Receiver Decoder***

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## **1 General information**

### **1.1 Description**

CRT1081IRD-S2-IP is a compact size 8-channel integrated receiver decoder. It combines 8 full featured DVB-S2 receivers with Common Interface for descrambling services, ASI output interfaces and 1Gbit Ethernet port for transport of DVB services over IP networks, 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 control all the system no matter where you are at the moment. Industry standard DVB-ASI or IP output interface makes it easy to serve Digital Video/Audio programs of MPEG2 or H.264 type to DVB multiplexers, IPTV networks etc.

## 1.2 Technical Specifications

### DVB-S2 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
Modulation	QPSK, 8PSK, 16APSK
SR	1-45Msps(QPSK,8PSK), 1-36Msps(16APSK)
FEC	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 6/7, 7/8, 8/9, 9/10

### 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

### DVB- over- IP

Specification	ETSI TS 102034
Streaming protocols	RTP, UDP
Number of multicast streams	64 (SPTS)
Number of unicast connections	8 (MPTS)
Network interface	1Gbit Ethernet

### Power supply

Supply voltage, VAC	90-264
Supply frequency, Hz	47-63

### Environment

Nominal temperature, °C	10 – 30
Maximal relative humidity, %	80

### Dimensions

Width, mm	485
Length, mm	300
Height, mm	44

## 2 Physical Description

### 2.1 Front View

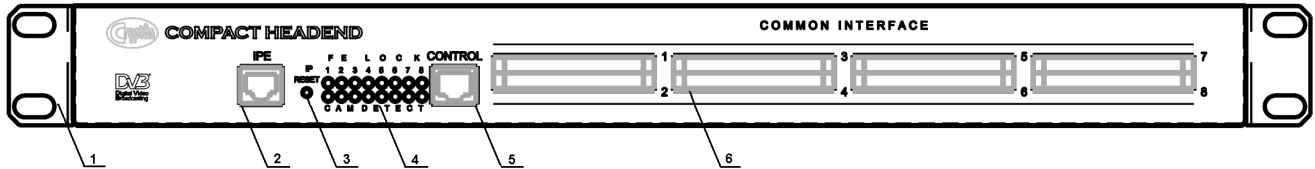


Fig. 1 Front view

1. Front panel with mounting holes;
2. 1Gbit Ethernet port for IP streaming of DVB services;
3. Device network settings RESET button;
4. LEDs for tuners lock and CAM modules insertion indication;
5. 100Mbit Ethernet port for device control;
6. Common Interface slots for CAM modules.

### 2.2 Rear View

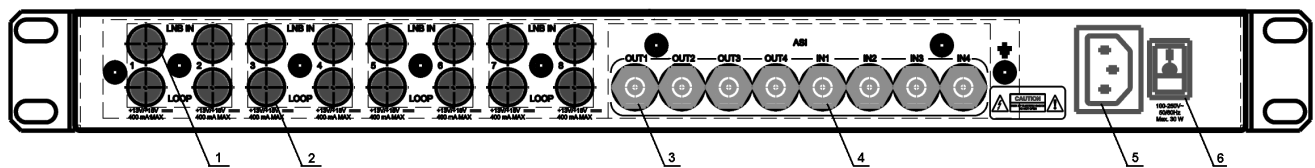


Fig. 2 Rear view

1. 8 LNB inputs of DVB-S2 receivers;
2. 8 LNB Loop outputs of DVB-S2 receivers;
3. 8 DVB-ASI outputs of DVB-S2 receivers;
4. Power socket;
5. Power switch.

### 3 Functional block diagram

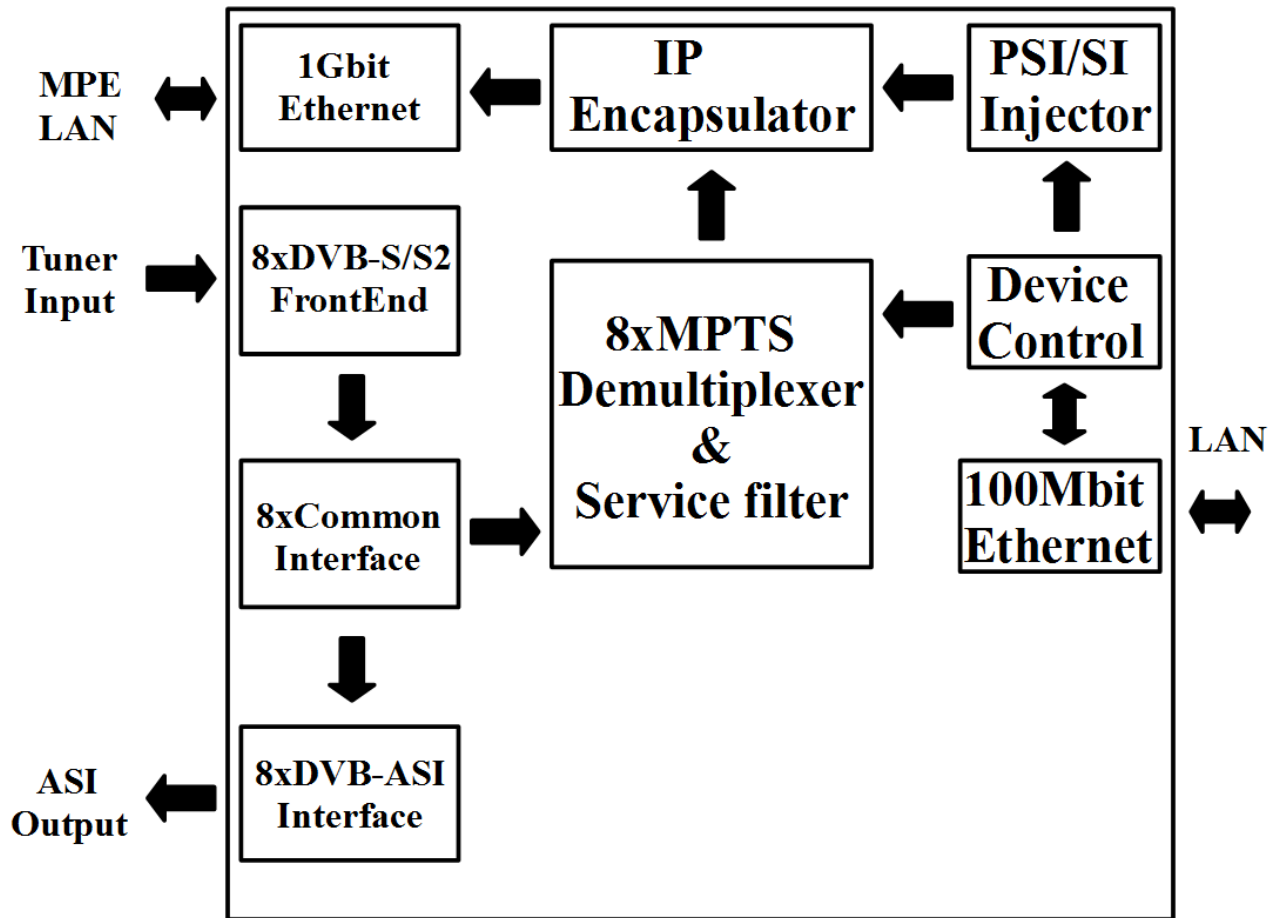


Fig. 3 Functional block diagram

1. **1Gbit Ethernet** is used to connect the device to the transport DVB-over-IP network;
2. **IP incapsulator** performs packing of DVB services into IP for network delivery;
3. **DVB-ASI interface** provide classical data exchange capability of Head-End equipment;
4. **DVB-S/S2 FrontEnd** supply into the system services from the satellite;
5. **Common Interface** let the CA protected services to be opened with the CAM;
6. **MPTS Demultiplexer&Service filter** provide the ability to only select programs required for re-broadcast;
7. **PSI/SI Injector** provide the new made multiplexes with proper DVB SI and MPEG PSI stream and program information;
8. **Device control** let you make all the device settings with embedded Http(Web) server;
9. **100Mbit Ethernet** connects the device to the HeadEnd control network.