

with ASI and IP outputs!



## Key Features

- 2 x DVB-S/DVB-S2 Inputs
- 2 x ASI-Outputs, GigEthernet output
- Frequency Range: 950 to 2,150 MHz
- BISS Descrambler – optional
- Web GUI Controls

## Description

Blankom DRD 694 is a twin DVB-S/S2-Receiver in a 19" 1RU housing. The satellite input signals are demodulated, descrambled and are routed as transport streams to the ASI and Gig-Ethernet outputs.

DRD 694 consists of two independent DVB-S/DVB-S2 receiver/demodulators with ASI and Gig Ethernet interfaces, a processor to control both receivers and redundant power supply.

DRD 694 receives two digital MPEG-2 or H.264 (MPEG-4) encoded packets of TV signals with DVB-S or DVB-S2 modulation from L-Band and generates two independent MPEG transport streams. By this it is a suitable solution for HDTV signals that are modulated as DVB-S2 signals. The MPEG transport streams are available after demodulation and error correction at the two ASI and the two GigEthernet outputs. The switching between DVB-S and DVB-S2 mode can be done automatically. Two ASI test ports at the front panel allow the control of the transport streams during operation.

Scrambled signals are descrambled via the DVB Common Interface (DVB-CI) with adequate Conditional Access Modules (CAM). Every input signal is fed over two DVB-CI interfaces. So the descrambling of more services within the transport stream with up to two CAM modules per each stream is possible. The implemented Decryption -Monitoring -System (DMS ) allows an efficient use of the CAMs for decryption of several services by the possibility to select only necessary PIDs of the transport stream for decryption. For further processing these descrambled transport streams are fed to ASI and GigEthernet outputs. The DRD 694 has an option to add an integrated BISS descrambler for both channels.

The local control is done with a convenient thumb wheel and an LCD- Display. An implemented web server allows the configuration with a standard web browser over a LAN/WAN network. For the monitoring over a Network Management System (NMS) an SNMP agent is implemented. DRD 694 is equipped with a redundant power supply making the device a solution for high professional tasks.

## Product Specifications

### RF-INPUT

<b>Input Impedance:</b>	75 Ohm (F-connector)
<b>Input Frequency (L-Band):</b>	950...2150 Mhz
<b>Input Signal level:</b>	-65 dBm to -25 dBm
<b>Bandwidth:</b>	36 MHz

### DVB-S (EN 300 421)

<b>Modulation:</b>	QPSK
<b>Roll-Off:</b>	35%
<b>Inner Coding (FEC):</b>	1/2; 2/3; 3/4; 5/6; 7/8 Viterbi, K=7
<b>Interleaving:</b>	Convolutional; I=12
<b>Outer Coding:</b>	Reed Solomon (RS) (204, 188, T=8)
<b>Symbol Rate:</b>	2 to 45 MS/s

### DVB-S2 (EN 302 307)

<b>Modulation:</b>	QPSK, 8PSK
<b>Roll-Off:</b>	20, 25, 35%
<b>Outer Coding:</b>	BCH
<b>Inner Coding:</b>	LDPC
<b>FEC Code-Rates: (depending on Modulation scheme)</b>	1/4; 1/3; 2/5; 1/2; 3/5; 2/3; 3/4; 4/5; 5/6; 8/9; 9/10
<b>FEC-Blocklength:</b>	64.800 Bit
<b>Symbol rate:</b>	8PSK 2 to 30 MS/s QPSK 2 to 36 MS/s

### OUTPUT (ASI, GigE)

- 2x ASI (for each channel)

<b>Impedance:</b>	2 Connector (BNC) 75 Ohm
<b>Return Loss:</b>	> 18 dB

- 2 x GigEthernet with the load of two transport streams

### TEST CONNECTOR (Front ASI A, ASI B)

<b>2x ASI / Impedance:</b>	75 Ohm (BNC)
<b>Return loss:</b>	> 18 dB

### CONDITIONAL ACCESS

- 2 x DVB/COMMON INTERFACES for each Input Signal
- BISS Descrambler – optional
- Decryption Monitoring System

### DVB-COMMON-INTERFACE (DVB-CI)

- VIACCESS, CRYPTOWORKS, CONAX, IRDETO  
other CA systems on request (2 DVB-CI Slots for each channel)

### MONITORING INTERFACES

- 10/100/1000 Mbit Ethernet, Web server, SNMP-Agent

### POWER CONSUMPTION

- < 50 Watt

### POWER SUPPLY VOLTAGE

- 100... 240 V
- Redundant Power Supply

### MECHANICAL

<b>Housing:</b>	19" x 1RU
<b>Dimension:</b>	19" W x 12.4 D x 1.75" H
<b>EMC:</b>	EN 50083-2
<b>Safety:</b>	EN 60950-1
<b>Environmental:</b>	ETSI EN 300019-1-3 Class 3.1

### CONTROL

- 10/100/1,000 MBit ETHERNET INTERFACE
- Web-Server
- SNMP-Agent for NMS
- Thumb Wheel and LCD-Display

### OPTIONS:

- BISS Descramble per each channel
- SMA input connectors

