BLANKOM
Quality for professionals

# IRD-6310 / 6311

## DVB & IPTV Integrated Receiver Decoder

- ☐ **One factory-selected RF tuner**
- ☐ **DVB-S/S2/S2X · DVB-C/T/T2/ISDB-T · ATSC-T**
- ☐ **2× CI · BISS-1 / BISS-E**
- ☐ **Single PSU standard · redundant dual PSU optional**




BLANKOM IRD-6310 / IRD-6311 · 19-inch 1U professional receiver and decoder

## Product Overview

Each BLANKOM IRD-6310 / IRD-6311 model combines **one factory-selected RF tuner**, two DVB-CI slots, BISS descrambling, transport-stream remultiplexing and **one HD/SD programme decoder** in a 19-inch 1U platform. They also accept two ASI inputs and up to 16 IP input streams.

Choose the required tuner module when ordering. Supported RF families are DVB-S/S2/S2X, DVB-C/T/T2/ISDB-T and ATSC-T. IRD-6310 provides two stereo audio channels; IRD-6311 provides one.

## Why Choose This Platform?

**RF, ASI and IP workflows in one receiver.**
The transport-stream path and the single-programme baseband decoder operate in the same unit. Two DVB-CI slots support authorised service descrambling according to the configured routing and CAM capability.

**Power configuration to suit the site.**
A single AC PSU is standard. Dual redundant AC power supplies are available as an ordering option for 24/7 critical installations.

## Key Features

- ✓ **One RF front end.** Factory-selected tuner module configuration.
- ✓ **One decoded programme.** HDMI, CVBS and both mirrored 3G-SDI connectors carry the selected service.
- ✓ **TS distribution.** One MPTS and up to 16 SPTS over IP; two mirrored ASI outputs carry the IP MPTS.
- ✓ **Descrambling.** Two CI slots plus BISS-1/BISS-E processing up to 120 Mb/s.
- ✓ **HD/SD codecs.** MPEG-2, H.264/AVC, HEVC/H.265 and AVS/AVS+ video decoding.
- ✓ **Operations.** Front-panel LCD/keypad, embedded Web NMS and web/USB firmware update.

## Typical Applications

**Broadcast reception & monitoring**
Receive an authorised service and feed local HDMI/SDI monitoring while distributing transport streams over IP or ASI.

**Flexible single-source reception**
Select satellite, cable/terrestrial or ATSC reception for the required installation.

**Headend descrambling & remultiplexing**
Process services received from RF, ASI or IP and route selected content downstream.

**IP/ASI to baseband decoding**
Decode one selected HD/SD programme for a monitor, router or recorder.

| RF FRONT ENDS | CI SLOTS | VIDEO DECODERS | POWER |
|---|---|---|---|
| 1 · factory selected | 2 | 1 programme | Single standard · dual redundant optional |

# Tuner & Ordering Configuration

**IRD-6310 / IRD-6311 are single-tuner models.** IRD-6310 provides two stereo audio channels; IRD-6311 provides one. This is the only functional difference within the model pair. Every model provides one independent decoded video programme.

## Model Family Matrix

| MODEL | RF TUNERS | STEREO AUDIO CHANNELS | PLATFORM |
|---|---|---|---|
| **IRD-6310** | 1 | 2 | Same functions and interfaces |
| **IRD-6311** | 1 | 1 | Same functions and interfaces |

## Three Single-Tuner Options

| CONFIG. | TUNER OPTION | ORDERING USE |
|---|---|---|
| **1** | DVB-S/S2/S2X | Satellite reception |
| **2** | DVB-C/T/T2/ISDB-T | Cable / terrestrial reception |
| **3** | ATSC-T | ATSC terrestrial reception |

**Ordering:** select one DVB-S/S2/S2X, DVB-C/T/T2/ISDB-T or ATSC-T tuner. DVB-T/T2 is always available within the cable/terrestrial tuner option.

### CABLE & TERRESTRIAL FRONT ENDS

| | |
|---|---|
| **DVB-C** | 60-890 MHz; J.83A/J.83C: 16/32/64/128/256-QAM; J.83B: 64/256-QAM; 1.0-7.0 Msps |
| **DVB-T / T2** | 60-890 MHz; 6/7/8 MHz channel bandwidth; DVB-T2 supported |
| **ISDB-T** | 60-890 MHz; DQPSK, QPSK, 16-QAM, 64-QAM |
| **ATSC-T** | 54-858 MHz; 8VSB; 6 MHz channel bandwidth |

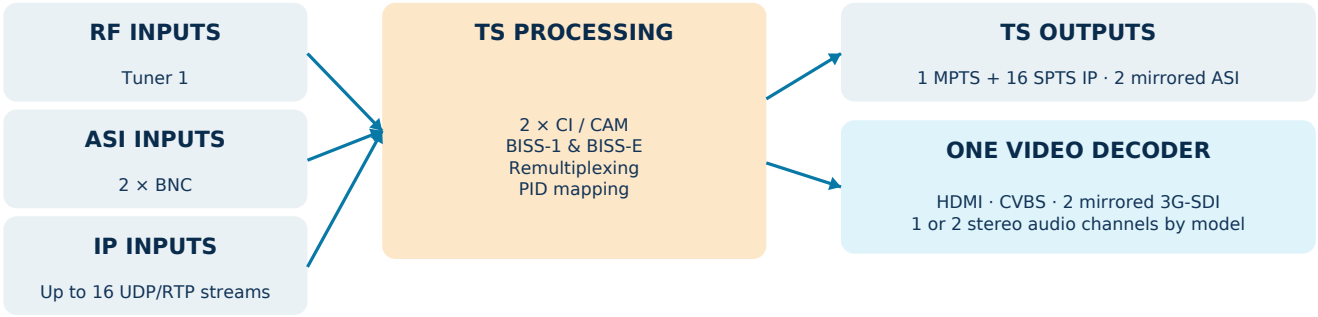
### SATELLITE FRONT END

| | |
|---|---|
| **DVB-S** | 950-2150 MHz; 0.5-45 Msps; -65 to -25 dBm; QPSK |
| **DVB-S2** | 950-2150 MHz; QPSK/8PSK/16APSK: 0.5-45 Msps; 32APSK: 0.5-40 Msps |
| **DVB-S2X** | 950-2150 MHz; QPSK/8PSK/16APSK: 0.5-45 Msps; 8APSK/32APSK: 0.5-40 Msps |

**Power selection:** Single AC PSU is standard on IRD-6310 / IRD-6311. Dual redundant AC PSU is an ordering option. Tuner modules and PSU configuration are factory-selected and must be stated with the order.

# Signal Flow & Technical Specifications

## Processing Architecture




**Important:** the two SDI connectors do not mean two independent decoded video programmes. The decoder output is one programme; SDI 1 and SDI 2 are mirrored.

## Panel Reference




Example rear panel · single PSU. Connector layout varies by tuner and PSU selection.

### TRANSPORT, DESCRAMBLING & VIDEO

| | |
|---|---|
| **Transport inputs** | 2 ASI inputs (BNC); up to 16 IP inputs over UDP/RTP on Gigabit Ethernet |
| **Descrambling** | 2 DVB-CI slots; each CAM may descramble multiple authorised services; BISS-1/BISS-E up to 120 Mb/s |
| **TS processing** | Remultiplexing; maximum 128 PID mappings per input |
| **IP output** | 1 MPTS plus up to 16 SPTS; UDP and RTP/RTSP; unicast/multicast; 1000Base-T |
| **ASI output** | 2 mirrored BNC outputs carrying a copy of the IP MPTS |
| **Video decoding** | 1 programme; MPEG-2, H.264/AVC, HEVC/H.265, AVS/AVS+; 4:2:0 |
| **Video outputs** | HDMI, CVBS, 2 × mirrored 3G-SDI |

### VIDEO, AUDIO, CONTROL & PHYSICAL

| | |
|---|---|
| **Video formats** | 1080p/i at 50/60; 720p at 50/60; 480i; 576i |
| **Audio variants** | IRD-6310: 2 stereo channels; IRD-6311: 1 stereo channel |
| **Audio decoding** | MPEG-1 Layer II, LC-AAC, HE-AAC, HE-AAC v2, Dolby Digital / Plus; AC-3 pass-through |
| **Ancillary data** | EIA-608/EIA-708 closed captions and Teletext via SDI |
| **Management** | Front-panel LCD/keypad; embedded Web NMS; updates via web and USB |
| **Mechanical** | 482 × 300 × 44.5 mm; 19-inch 1U; approximately 3.5 kg |
| **Power & environment** | Single AC PSU standard; optional dual redundant AC PSU; 100-240 VAC, 50/60 Hz; approx. 20 W; 0-45 °C |

**Ordering information:** specify model (IRD-6310 / IRD-6311), tuner standards, CAM/conditional-access requirements, programme to decode, output timing, IP/ASI stream plan and PSU selection. Single AC PSU is standard; dual redundant AC PSU is optional.