

# ELIUM

## IRD 2160 movieNET

ULTRA  
HD

DVB-S/S2/S2X SATELLITE DVB-C/C2 CABLE DVB-T/T2/HEVC TERRESTRIAL

IP TV



RF-Signal level - Meter

Stereo Volume Unit (VU) Meter



Control monitor



XLR



Audio balanced optional



PHOENIX

**Ultra High Definition Integrated Receiver Decoder** with highest requirements for quality and excellent HDTV / UHDTV 4K (optional) and Radio reception capabilities.

The **IRD 2160 movieNET** is equipped with tuners (combinations possible) to receive **DVB-S/S2/S2X / DVB-C/C2/T2/HEVC** signals and two integrated **Common Interface Slots (optional)** for decoding various conditional access modules to decrypt Pay-TV channels.

Through the open **GUI** (Graphical User Interface) with custom **HTML 5** is it possible to design / edit **customized user interfaces** (wallpapers, logos, menu layout and design, content, etc.).

**All device settings** can be made by using the **WebServer** or the **graphical Display** including front panel. The display serves as a **control monitor**, which is the playback of the current program, as well as present the audio by a **stereo volume unit (VU) meter**. In addition, the device has an **RF-signal level measurement** function of the received signal, which is also available on the front panel.

The **integrated Ethernet** and **RS232 control option** give the option to control the **IRD 2160 movieNET bidirectional** and enables an optimal integration into existing control systems. The Ethernet and RS 232 interface grant the user to consult program name (program logo), program information, EPG information ect..

The received programs of the tuner can be provide via the 1Gbit Ethernet interface (optional) to the IP network as **SPTS** (Single Program Transport Stream) or **MPTS** (Multi Program Transport Stream).

The devices are designed with **high-quality components**, for **continuous operation** and are **developed and produced in Germany**.

24/7

■ ■ ■ Made in Germany





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## IRD 2160 movieNET

### Features:

- MPEG-1/-2/-4, H.264 MVC up to 1080P@60fps
- SD/HD 480i/p, 576i/p, 720i/p, 1080i/p
- MP3, AAC, WMA, RM, FLAC
- DVB-S/S2/S2X or DVB-C/C2/T/T2 selectable
- Network channel search LCN (Logical Channel Numbering)
- Image format: 4:3 / 16:9
- 320x240 graphical Display: Control monitor function from current TV-program incl. tech. data  
Setting of all device function, stereo volume unit (VU) meter, Integrated RF-meter
- Bidirectional control via 100 Mbit Ethernet / RS-232 interface
- Integrated Webserver for administration and control
- Update via Front-USB / Ethernet / Webserver
- HTML5 based OSD to support changes of background, program logo/-namen, etc.
- Teletext, DVB Subtitling, EBU Teletext Subtitling
- EPG - Electronic Program Guide including event information
- Termo controlled fan (Power supply and System)
- Servicebutton to turn the display and front panel off (commissioning of more then one device)
- Volume level for each program adjustable
- Video: HDMI with Videoformat 4:2:0
- Audio: S/PDIF / Audio-L/R

### Optionale Features:

- H.264 AVC, H.265 HEVC bis zu 4Kx2K@60fps
- UHD 4Kx2K
- AC3 7.1 / 5.1 Down-Mix
- Combination of Tuner:  
DVB-S/S2/S2X and DVB-S/S2/S2X  
DVB-C/C2/T/T2 and DVB-C/C2/T/T2  
DVB-S/S2/S2X and DVB-C/C2/T/T2
- Up to 2 Common Interface Slots for Conditional Access Module like Alphacrypt (SKY,ORF),  
Conax, Irdeto Nagravision...
- 1 Gbit Ethernet Port for streaming support: SPTS (Single Program Transport Stream)  
MPTS (Multi Program Transport Stream)
- Remote control + 3,5 mm jack plug for infrared receiver
- Audiointerfaces: XLR 3pol. balanced or Phoenix balanced
- Video: HDMI with Videoformat 4:2:2 / HDR 10 Bit
- HDMI-Function: HDMI-CEC
- Redundant power supply with automatic changeover
- Up to 2 eSATA Interfaces
  
- App-Support for control systems like e.g.   Spotify  InternetRadio  BIZZ fm and more ...

## Technical Data

<p><b>Input option SAT and/or Cab/TER</b></p> <p><i>Combination: SAT and SAT Cab/TER and Cab/TER SAT and Cab/TER</i></p>	<ul style="list-style-type: none"> <li>• <b>DVB-S/S2/S2X:</b> EN 300 421/ EN 302 307 F-connector / 75 Ω impedance Frequency range : 950 - 2150 Mhz Symbol rate range: 1 - 45 Msyms DiSeqC: 1.0, 1.1, 2.0.</li> <li>• <b>DVB-C:</b> EN 300 429 /<b>C2:</b> EN 302 769 F-connector / 75 Ω impedance</li> <li>• <b>DVB-T:</b> EN 300 744 /<b>T2/HEVC:</b> EN 302 755 QAM: 16, 32, 64,128, 256 QPSK: 16 QAM, 64 QAM, 256 QAM, Frequency range: 48 - 862 Mhz Symbol rate range: 4 - 7 Ms/s</li> </ul>
<p><b>Conditional Access</b></p>	<ul style="list-style-type: none"> <li>• <b>2x DVB CI Slots: EN 50221 optional</b> for CAMs Alphacrypt (SKY, ORF), Aston, Conax, Cryptoworks, Indeto, Nagravision,...</li> </ul>
<p><b>Control</b></p>	<ul style="list-style-type: none"> <li>• Frontpanel (to control the hole device)</li> <li>• <b>IR remote control + 3,5 mm jack plug optional</b></li> <li>• RS-232 control - 9pol. D-Sub connector (Front &amp; Back)</li> <li>• Ethernet 100 Mbit - IEEE 802.3</li> <li>• WebServer</li> </ul>
<p><b>Information</b></p>	<ul style="list-style-type: none"> <li>• Graphical Display 320x240 (control monitor incl. Stereo Volume Unit (VU) Meter and RF-Meter)</li> <li>• EPG including Event Information (depending on Provider)</li> <li>• DVB Subtitling / EBU Teletext (depending on Provider)</li> <li>• Device information: OSD incl. CA Information, Audio and Video Information, Receiver Status, Service Information...</li> </ul>
<p><b>Output options</b></p>	<ul style="list-style-type: none"> <li>• <b>Video</b> HDMI - 480i/p, 576i/p, 720i/p, 1080i/p, <b>2160 i/p optional</b> <b>HDMI-HDR / HDMI-CEC optional</b> Videoformate: 4:2:0, <b>4:2:2 / HDR 10 Bit optional</b></li> <li>Decoding: MPEG-1/-2/-4, H.264 MVC bis zu 1080P@60fps MPEG-2 MP&amp;HL,MP&amp;ML,MP&amp;LL,SP&amp;ML,AVC HP&amp;L4.1,VC-1 AP&amp;L3,MP&amp;SHL <b>H.264 AVC, H.265 HEVC up to 4Kx2K@60fps optional</b> Image format: 4:3, 16:9</li> <li>• <b>Audio</b> Audio Analog Stereo unbalanced - 2 x RCA 75 Ω <b>Audio Analog Stereo balanced - 2 x XLR 3pol. 75 Ω optional</b> <b>Audio Analog Stereo balanced - 1 x Phoenix 75 Ω + S/PDIF - 1 xRCA optional</b> Digital output S/PDIF - 1 x RCA 75 Ω</li> <li>Decoding: MPEG-1/-2 Layer I and II, WMA bit-Streams, RM, FLAC, Mpeg-1 layer 3 (MP3) Selectable language option (depending on Provider) <b>AC3 7.1 / 5.1, AC3(plus)-decoder (Dolby-decoder) Down-Mix optional</b></li> <li>• <b>Streaming</b> Ethernet 1 Gbit - IEEE 802.31 for SPTS (Single Program Transport Stream) or MPTS (Multi Program Transport Stream)</li> <li>• <b>Recording</b> <b>Up to 2 eSATA Interfaces optional</b></li> <li>• <b>Power supply</b> Power supply 110 - 240 V AC <b>Redundant power supply optional</b></li> <li>• <b>Technical Connection/Function</b> USB 2.0 for Update on front panel RS-232 for Support on front panel Service button (Front and Back)</li> </ul>
<p><b>Physical</b></p>	<ul style="list-style-type: none"> <li>• Dimensions: 19" 1HE (485 /440 x 275 x 44 mm)</li> <li>• Weight: 3,6 Kg</li> <li>• Voltage: 110 - 240 V AC</li> <li>• Power: 25 W max</li> <li>• EMC: EN 50083-2</li> <li>• Secure: EN 60950-1</li> <li>• Environment: ETSI EN 300019-1-3 Class 3.1</li> </ul> <p style="text-align: right;">ver.02</p>