



## ARCHITECTURAL AND ENGINEERING SPECIFICATION

### PRODUCT: HDMI-OPTN-RX100AU2K

#### FUNCTIONAL OVERVIEW

The HDMI-OPTN-RX100AU2K is a fiber-based SDVoE receiver endpoint for AV-over-IP distribution over 10Gbps networks. It receives an SDVoE stream via an SFP+ optical interface (or DAC) and outputs HDMI 2.0 video/audio to a display. The AU2K variant adds USB KVM functionality (Icron USB 2.0 interface), providing USB HID and USB 2.0 peripheral extension between receiver (REX) and transmitter (LEX) through the OPTN link in a TPN/OPTN system. It also provides analog audio de-embedding and supports extension of control and utility signals (e.g., RS-232 and Ethernet) through the SDVoE link when used in a TPN/OPTN system managed by a Matrix Management Unit (MMU).

#### VIDEO INPUT (OPTN / SDVOE)

- Connector type: SFP+ port slot
- Data rate: Up to 10Gbps
- Accepted interfaces: 10G SFP+ optical transceiver modules; 10G DAC cables
- Compliance: SDVoE
- HDCP compliance: HDCP 2.2
- Transferred signals: Video, Audio, RS-232, Infrared, Ethernet, CEC
- Color space: RGB, YCbCr
- Video latency: 0 frame (five lines/ under 8ms)
- Compression ratio: 1.4 to 1
- Supported resolutions at 8 bits/color: up to 4096x2160@60Hz (4:4:4) or up to 3840x2160@60Hz (4:4:4)

#### VIDEO OUTPUT (HDMI)

- Connector type: 19-pole HDMI Type A receptacle
- Standard: DVI 1.0, HDMI 1.4, HDMI 2.0
- Supported resolutions at 8 bits/color: up to 4096x2160@60Hz (4:4:4) or up to 3840x2160@60Hz (4:4:4)
- CEC support: Transparent

## AUDIO CAPABILITIES

- Embedded HDMI audio supported (via SDVoE and HDMI output):
  - 8 channel PCM
  - Dolby Digital, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos
  - DTS, DTS-HD Master Audio 7.1, WMA Pro
- Analog audio de-embedding output
  - Connector: 5-pole Phoenix connector
  - Audio formats: 2-channel PCM
  - Signal transmission: Balanced signal
  - Sampling frequency: 48 kHz

## POWERING

- External power adaptor
- Supported power source: 100–240 V AC; 50/60 Hz
- Supplied power: 12V DC, 2A
- DC power plug: Locking DC connector (2.1 mm pin)

## CONTROL

- Ethernet control interface (endpoint contains RJ45 connectors)
  - Ethernet data rate: 1GBase-T, full duplex with autodetect (2 connectors per unit)
- RS-232 serial port
  - Connector: 3-pole Phoenix® connector
  - Baud rates: 9600 to 115200
  - Data bits: 8
  - Parity: None / Odd / Even
  - Stop bits: 1 / 2
- USB KVM (Icron USB 2.0) functionality
  - Receiver operates as REX (Remote Extender)
  - USB routing/pairing configurable in a TPN/OPTN system via MMU using built-in web, REST API, or LW3

## MOUNTING OPTIONS

- Rack mountable using Lightware mounting accessories (model listed in mounting compatibility table):
  - 1U High Rack Shelf (4x)
  - UD Mounting Kit (1x)
  - UD Mounting Kit Double (2x)
  - UD Mounting Plate F110 (1x)
  - UD Mounting Plate F120 (2x)
  - PRC-16-312 rackmount cage (16x)
- Ventilation note: Top and side ventilation holes must not be covered

## GENERAL

- Dimensions: 100.4 W × 151.8 D × 26 H mm
- Weight: 476 g (1.05 lbs)
- Enclosure material: 1 mm steel
- Mounting options: rack mountable with compatible Lightware mounting accessories (see Mounting section list)
- LVD / electrical safety compatibility: EN 62368-1:2024
- Other compliance: CE, UKCA; EMC EN 55032:2015+A1:2020 (emission), EN 55035:2017+A11:2020 (immunity); RoHS EN 63000:2018; laser safety EN 60825-1:2014+A11:2021
- Warranty period: 3 years
- Cooling: Passive
- Operating environment: 0 to +50°C; humidity 10% to 90% non-condensing (storage: -40° to +85°C)
- Supplied accessories (in the box):
  - Safety & Warranty Info
  - Quick Start Guide
  - 12V DC adaptor with interchangeable plugs
  - Phoenix® Combicon 3-pole connector
  - Phoenix® Combicon 5-pole connector
- Optional accessory: Singlemode / multimode SFP+ module
- Packaging: the product has full paper / green packaging



## DOCUMENT REVISION HISTORY

| Document | Release Date | Changes         | Checked by    |
|----------|--------------|-----------------|---------------|
| v1       | 2026-07-20   | Initial version | Tamas Forgacs |