DIREKT ROUTER

Buffer and redistribute video over Internet and other IP nets or acts as an advanced video receiver

Direkt routers are used for connecting video links, change IP streams between unicast and multicast or to add or remove error correction. Direkt router can be customized with transcoding, multiview and SDI outputs. It then becomes an advanced receiver with many different areas of use.

IMPORTANT CHARACTERISTICS

A Direkt router in an IP link system gives foremost the following advantages.

Supervision and alarms
IP streams, which enters a Direkt router can be supervised and trouble shooted via ISS – Intinors system for statistics and supervision.

Error correction
Direkt router can receive and send IP streams with error correction (FEC or TCP with buffering).

Adaptive bitrate
Direkt router automatically handles variable bitrate on incoming IP streams.

Network de-bonding
Direkt router receive and assemble video transmitted over multiple IP streams.

Access control
On Direkt router, one can control access to input streams on each respective input.

MULTICHANNEL

Direkt router has six separate inputs, which can be configured individually. More inputs can be added.

FORMAT

Direkt router is delivered in a format which can be installed in a 19" rack with all connectors on the rear side. Power supply is built in and 100 – 240V AC is fed using an ordinary power cord.

STANDARD FUNCTIONS

The following functions are present on Direkt router:

- Multiple output streams on each channel
- Easy to configure via display and keypad
- Can be controlled via web interface over network
- Settings can be stored in profiles
- Peak Programme Meter (PPM) shows if audio is present
- By connecting a USB storage, Direkt router can record to files
- ISS – Intinors system for statistics, supervision and troubleshooting
- Backup settings and upgrade software via web interface or ISS
- Receive video streams from a number of different units
- Can resend video streams to a number of different receivers
- Recorded files can be downloaded via the web interface
- FEC – error correction with low delay
- IPMI

OPTIONS

Direkt router is primarily customized using options. Other customer tailored solutions are made on order.

4-wire talkback

By using 4-wire talkback, Direkt link can connect to other Direkt units for audio communication with short delay. The option gives two full duplex mono channel, for example control room and studio return.

Multiple video inputs

Direkt router can be customized with multiple video inputs.

Transcoding

Direkt router can transcode a stream with video and audio to MPEG2 or H.264-format in a specific encoding mode before it redistributes it. This option is available for web TV or broadcast.

Multiview

Multiple inputs on can be encoded as a multiview video in MPEG2- or H.264-format.

SDI outputs

With one or multiple SDI outputs (HD/SD) Direkt router becomes an advanced video receiver with many areas of use. The user can connect IP inputs with SDI outputs and by this way use many more Direkt links than the physical outputs available. One SDI output can also be used for multiview.

Mixer control

With an external mixer control you can easily control which input is connected to the respective SDI output.

Extra LAN

Extra network interfaces can be useful if Direkt router distributes video streams over multiple networks.

RTP or RTMP out

Direkt router have support for sending video streams using RTMP as transport instead of MPEG-TS. RTMP streams can be received and redistributed by streaming servers for web TV. i.e Adobe Media Server and Wowza Media Server.

Encryption

The video stream between Intinor Direkt link, Direkt router and Direkt receiver can be encrypted and authenticated in a very secure way if needed.

Internal storage

Direkt router can be equipped with internal hard disk or a RAID system with multiple disks for recording of video streams.

Redundant power supply

Direkt router can be customized with redundant power supply for highest possible availability.

TECHNICAL SPECIFICATIONS

Transport in/out	MPEG2-TS över IP (ISO/IEC 13818-1) - UDP and TCP RTP (RFC 3550, 2250) RTMP (option) FEC Pro-MPEG COP#3, SMPTE ST 2022-2:2007
Digital out SDI (option)	SMPTE 259M, SMPTE 272M (SD) SMPTE 292M, SMPTE 299M (HD)
Resolutions out SDI (options)	PAL, NTSC, 720p/50, 720p/59,94, 720p/60, 1080p/23,98, 1080p/24, 1080i/25, 1080i/29,97, 1080i/30
Interface in/out	Dual Ethernet 10/100/1000, RJ45
Hard disk for archiving	External USB2.0
Size 1U (without removable rack brackets)	425 x 380 x 45 (w x d x h), Fits in 19" rack (1U)
Weight approximately	5200g

Available connections and layout varies depending on chosen configuration

INTINOR
TECHNOLOGY