



## DIREKT LINK 300 & 400. SEND HIGH QUALITY VIDEO OVER INTERNET AND OTHER IP NETWORKS

### STANDARD FUNCTIONS

- Multiple outputs
- HDMI out for monitoring
- Constant bitrate in pre-configured encoding modes
- Adaptive encoding parameters for automatic handling of the capacity of Internet connection
- Network bonding uses several Internet connections for higher capacity and redundancy
- Scales input signal to encoding resolution of choice
- Easy to configure via display and keypad
- Can be controlled via web interface over network
- Create profiles for multiple destinations
- Peak Programme Meter for calibration of sound level
- Record to files by connecting a USB storage
- Download recorded files from web interface
- ISS for statistics, supervision and troubleshooting
- Backup and upgrade via web interface or ISS
- Send to a number of different types of receivers
- Create your own encoding settings
- Test picture can be encoded and customized
- Management via IP2 (secondary network interface)
- IPMI (only on rack models)

### FUNCTIONS FOR WEB TV

- Send video using RTMP to Adobe Streaming Server and Wowza Media Server
- Supports multiple resolutions and frame rates
- Record files in .flv-format

### FUNCTIONS FOR BROADCAST ON 400 SERIES

- Send streams using UDP for shortest possible delay
- Interlaced video and anamorphic resolutions
- FEC - forward error correction with low delay

### DIFFERENT MODELS

Intinor	300-series (webTV)		400-series (Broadcast)		
	Mobile*	Rack	Mobile*	Rack	Rack+
Direkt link					
Inputs	1xSDI 1xHDMI	2xSDI	2xSDI	2xSDI	2xSDI
Audio channels	2	8	8	16	16
Built in mixer	Yes	Yes	Yes	Yes	-
WebTV	Yes	Yes	Yes	Yes	Yes
Broadcast	-	-	Yes	Yes	Yes
Redundant power supply	-	Option	-	Option	Yes
Network bonding	Yes	Yes	Yes	Yes	Yes
FEC	-	-	Yes	Yes	Yes
HDMI out for monitoring	Yes	Yes	Yes	Yes	-

### DIFFERENT FORMATS

#### RACK

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

#### MOBILE\*

For a Direkt link which is often moved around, the mobile format is recommended. Power supply is external, which makes it easy to run Direkt link from battery when needed (9-24V DC). Built-in 3G/4G modem



\* Not available in all regions

## OPTIONS

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

### 4K/VR360

For VR360 applications we can offer optional 4K video input (SDI & HDMI). We also provide a cropping feature for removing upper and lower part of picture.

### 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 4G\*

All Direkt Links have network bonding as standard, but can be equipped with the ability to use multiple 4G modem.

### BATTERY CABLE

Direkt link mobile can be equipped with battery cable to run on camera battery

### CASE

All Direkt links can be delivered in custom cases.

### EXTRA ENCODER

Direkt link can encode the input signal to one or multiple other encoding modes. For example if one want to record in higher quality or send in multiple qualities.

### INTERNAL HARD DISK

Direkt link which is often used for recording video can be equipped with internal hard disk or a RAID system with multiple disks.

### ENCRYPTION

The video stream between Direkt link 400 series and Intinors Direkt receiver can be encrypted and authenticated in a very secure way if needed.

### AUTOMATIC FILE SYNC USING FTP

When a new file is ready on the Direkt link or router and live streaming has stopped, it automatically uploads the file.

### MPEG2

MPEG2 is still often used for distribution to cable TV. It can also be wise to record in MPEG2 format since it's usually faster to import and work with in different video editing programs.

## TECHNICAL SPEC.

Digital out SDI embedded	SMPTE 259M, SMPTE 272M PAL, NTSC 0-16 audio channels
Digital in HDSDI embedded	SMPTE 292M, SMPTE 299M 720p/50, 720p/59,94, 720p/60, 1080p/23,98, 1080p/24, 1080p/50, 1080p/60, 1080i/25, 1080i/29.97, 1080i/30 0-16 audio channels
Digital in HDMI	Only Direkt link 300 mobile
Digital video ut H.264	H.264/MPEG4 AVC video (ISO/IEC 14496-10) BP@L3.0 - HiP@L5.1 (4:2:0)
Digital video ut MPEG2 (option)	MPEG2 video CBR (ISO/IEC 13818-2) MP@ML, MP@HL, HP@ML, HP@HL (4:2:0) 422@ML, 422@HL (4:2:2)
Digital audio out	MPEG1 audio layer 2 (ISO/IEC 11172-3) AAC (ISO/IEC 14496-3:2005) MAIN
Transport out TCP	MPEG2-TS over IP (ISO/IEC 13818-1) adaptive bitrate
Transport out RTMP	
Transport out Network bonding	Proprietary, adaptive bitrate and resolution
Transport out UDP (only on broadcast models)	MPEG2-TS overIP (ISO/IEC 13818-1) UDP and RTP (RFC 3550, RFC 2250)
Error corrections UDP (only on broadcast models)	FEC: Pro-MPEG COP #3, SMPTE ST 2022-1:2007
Interface out	2 Ethernet 10/100/1000, RJ45 Extra RJ45 via external USB-LAN
4G/LTE	Built-in on mobile Direkt links External USB modem on rack models
Hard disk for archiving	Extern USB2.0 / USB3.0
Size mobile	190 x 150 x 75 (w x d x h)
Size rack (without removable rack brackets)	425 x 380 x 45 (w x d x h) Fits in 19" rack(1U)
Size rack+	440 x 450 x 90" (w x d x h)
Weight approximately	1500g (mobile), 5200g (rack) 13300 (rack+)
Power consumption	Max 60W (mobile), Max 100W (rack)