12 Specifications

Video

- Resolution (local): max 1920 × 1200 pixels
- Resolution (remote): max 1600 × 1200 pixels
- Transmission distance: - Single mode fibre: 10 000 m
  - Multi mode fibre: 550 m
- Transmittable signals: R, G, B, H-Sync., V-Sync., Sync in green

Keyboard / Mouse
(COMPUTER + USER SIDED)

- Interface/transmission: PS/2, USB / Intelli mouse, Explorer mouse, optical Intelli mouse, optical Explorer mouse; RS 6000, HP 9000, SGI, DEC Alpha Station, via adaptation: Sun, MAC

Mixed operation possible

RS232

- Transmission rate: max 57600 bit/s
- Transmittable signals: TxD, RxD, RTS, CTS, DTR, DSR, DCD

Audio

- Resolution: 18 bit digital
- Scan rate: 48 kHz
- Bandwidth: 22 kHz
- Microphone pre-amplification: 20dB

Size: LwLVision-PC
(W x H x D in mm) 210 x 44 x 210 (19“ / 1 unit)
LwLVision -REM
210 x 44 x 210 (19“ / 1 unit)

Transmitting cable: Single mode, 9/125µm
Multi mode fibre, 50/125µm

Ambient conditions:

Operation: +5°C to +45°C
Storage: -10°C to +55°C

Humidity:

20%-80% RH, not condensating

Power Supply

	Main Power Supply	Redundant Power Supply
LwLVision-PC	100 – 240 VAC primary 50 – 60 Hz, 0,3A	12 VCD, 1,2 A
LwLVision-Rem	100 – 240 VAC primary 50 – 60 Hz, 0,5A	12 VCD, 2,2 A
LwLVision/MC2-PC	100 – 240 VAC primary 50 – 60 Hz,0,4A	12 VCD, 1,9 A
LwLVision/MC2-Rem	100 – 240 VAC primary 50 – 60 Hz, 0,6A	12 VCD, 3,0 A

Optical Specifications:

	Property	LwLVision (M)	LwLVision (S)
Trans-mitter	Launched Power (P_{OUT})	-9.5 dBm (min.) [(1)] -4 dBm (max.) [(1)]	-9.5 dBm (min.) [(2)] -3 dBm (max.) [(2)]
	Center Wavelength	850 nm (830 nm - 860 nm)	1310 nm (1270 nm - 1355 nm)
Receiver	Optical Input Power-maximum (P_{IN})	0 dBm (min)	-3 dBm (min)
	Sensitivity (P_{IN})	-18 dBm (max) [(1)]	-20 dBm (max) [(2)]
	Stressed sensitivity	-13.5 dBm (max) [(1)]	-14.4 dBm (max) [(2)]

[(1)] With 50 µm single mode faser.
[(2)] With 9 µm single mode faser.

Technical Data

Features of the »LwLVision-USB 2 .0« series

DVIVISION-USB 2.0 SERIES		
Graphics	Signal type (input):	digital or analog
	Signal type (output):	digital or analog
	Resolution: › Details see page 12	max. 1920 × 1200 @ 60 Hz
	Colour depth: › Details see page 12	max. 24 bits
	Pixel rate:	up to 165 MHz
	Vertical frequency:	25 kHz to 130 kHz
	Horizontal frequency:	20 Hz to 100 Hz
USB 2.0	Transmission type:	transparent
	Transmission rate:	up to 480 Mbit/s
	Supported devices:	High-Power-Devices (up to 500 mA)
Audio	Transmission type:	transparent, bi-directional
	Resolution:	24 bit digital, stereo
	Sampling rate:	96 kHz
	Bandwidth:	22 kHz
RS232	Transmission type:	transparent
	Transmission rate:	max. 115.200 bit/s
	Transmitted signals:	RxD, TxD, RTS, CTS, DTR, DSR, DCD
Main power supply	Type:	internal power pack
	Connection:	IEC plug (IEC-320 C14)
	Voltage:	AC100-240V/60-50Hz
Redundant power supply	Type:	external power pack
	Connection:	miniDIN-4 power socket
	Voltage:	+12VDC
Operational environment	Air humidity:	< 80%, non-condensing

Module features

LWLVISION-ARU2-PC | COMPUTER MODULE		
Interfaces for computer	Video:	1 × DVI-I socket
	PS/2 keyboard/mouse:	2 × PS/2 socket ‣ via connection cable to HD15 plug
	USB keyboard/mouse:	1 × USB-B socket
	Audio:	1 × 3,5-mm jack plug (Line In) 1 × 3,5-mm jack plug (Line Out)
	RS232:	1 × D-Sub 9 socket
Interfaces for local console	Monitor:	1 × DVI-I socket
	Keyboard/Mouse:	2 × PS/2 socket
Interfaces to user module	Keyboard/Mouse/Video signal:	1 × SC-Duplex socket
	USB 2.0 signal:	1 × LC-Duplex socket
Power consumption	Main Power	AC100-240V/60-50Hz/0.3-0.2A
	red. Power	12VDC/0.9A
Casing	Material:	anodised aluminium
	Dimensions (W × H × D):	270 × 44 × 210 mm (Desktop) 19" × 1 U × 210 mm (Rackmount)
Operational environment	Temperature:	+5 to +40 °C

LWLVISION-ARU2-REM	USER MODULE	
Interfaces for console	Monitor:	1 × DVI-D socket 1 × HD15 socket
	Keyboard:	1 × PS/2 socket 1 × USB-A socket
	Mouse:	1 × PS/2 socket 1 × USB-A socket
	USB 2.0:	2 × USB-A socket (front panel) 2 × USB-A socket (back panel)
	Audio:	1 × 3,5-mm jack plug (Speaker) 1 × 3,5-mm jack plug (Micro In)
	RS232:	1 × D-Sub 9 plug
Interfaces to computer module	Keyboard/Mouse/Video signal:	1 × SC-Duplex socket
	USB 2.0 signal:	1 × LC-Duplex socket
Power consumption	Main Power	AC100-240V/60-50Hz/0.5-0.3A
	red. Power	12VDC/2.1A
Casing	Material:	anodised aluminium
	Dimensions (W × H × D):	270 × 44 × 210 mm (Desktop) 19” × 1 U × 210 mm (Rackmount)
Operational environment	Temperature:	+5 to +40 °C

Laser transmission components

Laser transmission components for KVM data

SINGLEMODE-VARIANTE		
Data transmission	Type:	Fibre optics (2 fibres)
	Type of interface:	SC-Duplex
Cable length (max.)	Single-mode 9/125µm, Class OS1:	2 kilometres
	Wave length (λ):	1310 nm (1270 nm to 1355 nm)
Power data	Optical power output (P_{AVG}) in 9 µm SMF:	-9,5 dBm bis -3 dBm
	Receiver sensitivity (P_{MIN}):	-20 dBm
	Sensitivity – Stressed (P_S):	-14,4 dBm

MULTIMODE-VARIANTE		
Data transmission	Type:	Fibre optics (2 fibres)
	Type of interface:	SC-Duplex
Cable length (max.)	Multi-mode 50/125 µm, Klasse OM2:	550 metres (fibres with 500 MHz*km), 500 metres (fibres with 400 MHz*km)
	Multi-mode 62,5/125 µm, Class OM1:	220 metres (fibres with 160 MHz*km), 275 metres (fibres with 200 MHz*km)
Power data	Wave length (λ):	850 nm (830 nm to 860 nm)
	Optical power output (P_{AVG}) in 50 MMF:	-9,5 dBm to -4 dBm
	Receiver sensitivity (P_{MIN}):	-18 dBm (50 µm MMF)
	Sensitivity – Stressed (P_S):	-13,5 dBm (50 µm MMF)

Transmission modules for USB 2.0 data

SINGLE-MODE TRANSMISSION MODULE		
Data transmission	Type:	Fibre optics (2 fibres)
	Type of interface:	LC-Duplex
Cable length (max.)	Singlemode 9/125µm, Class OS1:	2 kilometres
	Wave length (λ):	1310 nm (1270 nm to 1360 nm)
Power data	Optical power output (P_{AVG}) in 9 µm SMF:	-9,5 dBm to -3 dBm
	Receiver sensitivity (P_{MIN}):	-19 dBm
	Sensitivity – Stressed (P_S):	-14,4 dBm

MULTI-MODE TRANSMISSION MODULE		
Data transmission	Type:	Fibre optics (2 fibres)
	Type of interface:	LC-Duplex
Cable length (max.)	Multimode 50/125 µm, Class OM2:	550 metres (fibres with 500 MHz*km), 500 metres (fibres with 400 MHz*km)
	Multimode 62,5/125 µm, Class OM1:	220 metres (fibres with 160 MHz*km), 275 metres (fibres with 200 MHz*km)
Power data	Wave length (λ):	850 nm (770 nm to 860 nm)
	Optical power output (P_{AVG}) in 50 or 62,5 µm MMF:	-9,5 dBm to -3 dBm
	Receiver sensitivity (P_{MIN}):	-17 dBm
	Sensitivity – Stressed (P_S):	-13,5 dBm (50 µm MMF)