

# DL-VISION(M)-ARU2+CON

KVM extenders, Article number A1220225



The KVM extenders of the DL-Vision series extend keyboard, video, and mouse signals, as well as other peripheral data (e.g., audio and USB), via a dedicated fiber connection (up to 10,000 m) uncompressed, pixel-perfect and without any latency or loss. An extender system consists of a computer module (CPU) and a console module (CON). The DL-Vision series supports DualLink-DVI for high-resolution video up to 2560 × 1600 (60 Hz) or 4096 × 2160 (30 Hz).

## SCOPE OF DELIVERY

| Quantity | Description                    | Article number |
|----------|--------------------------------|----------------|
| 2        | PowerCable-2 Standard cable 2m | A6300057       |
| 1        | 19" RM-Set-436-1RU-Type2       | A7000011       |

## DETAILS

### VIDEO

- EDID data utilization from the workplace monitor
- Flexible EDID profile options for optimized monitor settings
- Resolution up to  
2560 × 1600 @ 60 Hz

### SIGNALS

- Transparent audio signals (stereo, analog)
- Transparent RS232 (max. 230,400 bps)
- USB 2.0 with Hi-Speed (separate transmission line, transparent, all USB classes)

### TRANSMISSION

- The transmission distance is up to 400 meters over fiber multimode optics, incl. transmission module(s)/SFP transceiver(s)

### DEVICE

- Improved security through physical separation between workplaces and computers
- Access to standard interfaces of the computer, with no software installation required
- MultiChannel variants (MC): Modules for multi-monitor workplaces with multi-channel video
  - MC mode uses the full bandwidth for each video channel, whereby a separate transmission line is required for each channel

### WARRANTY

- A 3-year, free of charge product guarantee
- For an additional fee guarantee extension/guarantee renewal possible

## FEATURES

### SECURITY FEATURES

- Early detection of security incidents or unusual activities through continuous monitoring via Syslog, monitoring, and SNMP
- Comprehensive rights management and user administration, allowing precise control over which user can access which resources
- Option for activatable access protection (default operating mode in matrix systems), in which authentication is required before accessing computer sources
- Support for external directory services (Active Directory, Radius, LDAP) to meet company security policies
- Freeze function: If the video signal is lost, the last displayed image is frozen and highlighted with a colored frame and timer
- Redundant internal power packs
- Redundant network interface

### OPERATION FEATURES

- Ready for operation out of the box, no additional configuration required
- Permanent keyboard/mouse emulation ensures a stable system
- Operation via multilingual on-screen display (OSD) and hotkeys
- Support of DDC/CI (Display Data Channel / Command Interface) to enable centralized software-side control of monitor settings such as brightness
- Local console at the computer module allows on-site operation, including all video channels
- Exclusive or concurrent operation: The KVM extender allows computer control both remotely and locally. When an input is detected, the extender automatically locks the competing console. The lock is lifted after a preset timeout if no further input is detected. A key combination can activate exclusive operation, immediately disabling the competing console. Another key combination restores shared control.

## TECHNICAL DATA

|               |                                 |                                                                                                                                                                                                    |
|---------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General       | Product group                   | KVM extenders                                                                                                                                                                                      |
| Input options | USB mouse                       | yes                                                                                                                                                                                                |
|               | USB keyboard                    | yes                                                                                                                                                                                                |
|               | PS/2 mouse                      | yes                                                                                                                                                                                                |
|               | PS/2 keyboard                   | yes                                                                                                                                                                                                |
| Transmission  | Number of transmission channels | 2                                                                                                                                                                                                  |
|               | Redundant transmission channels | no redundant KVM transmission                                                                                                                                                                      |
|               | Range                           | 400 m (50.0/125µm, OM4 - 4700MHz*km)<br>300 m (50.0/125µm, OM3 - 2000MHz*km)<br>82 m (50.0/125µm, OM2 - 500MHz*km)<br>66 m (50.0/125µm)<br>33 m (62.5/125µm, OM1 - 200MHz*km)<br>26 m (62.5/125µm) |
|               | Laser class                     | Class 1                                                                                                                                                                                            |
|               | Type of interface               | LC-Duplex                                                                                                                                                                                          |
|               | Wavelength                      | 850 nm                                                                                                                                                                                             |
|               | Medium                          | Fiber MM                                                                                                                                                                                           |
|               | Data rate                       | 10 Gbit/s                                                                                                                                                                                          |
|               |                                 |                                                                                                                                                                                                    |
| Video output  | Number of video channels        | 1                                                                                                                                                                                                  |
|               | Format                          | DualLink DVI                                                                                                                                                                                       |
|               | Colour depth                    | 24 bit                                                                                                                                                                                             |

|       |                                |                                                                                                                                                                                                                                                                                                 |
|-------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|       | Pixel rate                     | ca. 25 MPixel/s to ca. 330 MPixel/s                                                                                                                                                                                                                                                             |
|       | Vertical frequency             | 20 Hz to 120 Hz                                                                                                                                                                                                                                                                                 |
|       | Horizontal frequency           | 25 kHz to 185 kHz                                                                                                                                                                                                                                                                               |
|       | Exemplary resolutions          | 2560 × 1600 (60 Hz) - 2K / WQXGA<br>4096 × 2160 (30 Hz) - 2K / WQXGA<br>2048 × 2160 (60 Hz) - 2K / WQXGA<br>2048 × 2048 (60 Hz) - 2K / WQXGA<br>3840 × 2160 (30 Hz) - 2K / WQXGA<br>Further VESA and CTA standardised resolutions possible within pixel rate and horizontal/vertical frequency. |
|       | Supported industry standards   | Enhanced Display Data Channel (E-DDC)<br>Display Data Channel Command Interface (DDC/CI)                                                                                                                                                                                                        |
| Audio | Transmission type              | Stereo<br>Transparent                                                                                                                                                                                                                                                                           |
|       | Resolutions                    | 24 bit digital                                                                                                                                                                                                                                                                                  |
|       | Sampling rate                  | up to 96 kHz                                                                                                                                                                                                                                                                                    |
|       | Bandwidth                      | 22 kHz                                                                                                                                                                                                                                                                                          |
|       | Audio support                  | Analog                                                                                                                                                                                                                                                                                          |
| USB   | Separate USB transmission port | yes                                                                                                                                                                                                                                                                                             |
|       | Specification                  | USB 2.0                                                                                                                                                                                                                                                                                         |
|       | Medium                         | Fiber MM                                                                                                                                                                                                                                                                                        |
|       | Transmission rate              | 480 Mbit/s (Hi-Speed)                                                                                                                                                                                                                                                                           |
|       | Range                          | max. 550 m                                                                                                                                                                                                                                                                                      |
|       | Power (output)                 | 500 mA (HighPower)                                                                                                                                                                                                                                                                              |

|             |                          |                                               |
|-------------|--------------------------|-----------------------------------------------|
| Serial      | USB classes              | All                                           |
|             | Standard                 | RS232                                         |
|             | Transparent transmission | yes                                           |
|             | Data rate                | max. 230400 bps                               |
|             | Signals                  | TxD<br>RxD<br>DTR<br>DSR<br>RTS<br>CTS<br>DCD |
| Network     | Medium 1                 | CAT7<br>CAT6<br>CAT5                          |
|             | Data rate 1              | 10 MBit/s<br>100 MBit/s<br>1 GBit/s           |
|             | Medium 2                 | CAT5<br>CAT6<br>CAT7                          |
|             | Data rate 2              | 10 MBit/s<br>100 MBit/s<br>1 GBit/s           |
| Maintenance | Update via               | ConfigPanel (Network)                         |
|             | Serviceport settings     | 230400bps (8/N/1)                             |
| Housing     | Material                 | anodised aluminium                            |
|             | Width                    | ca. 436 mm                                    |
|             | Height                   | ca. 44 mm                                     |

|                      |                            |                                                                                                                                                                                                                                                                   |
|----------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | Depth                      | ca. 284 mm                                                                                                                                                                                                                                                        |
|                      | IP protection class        | IP20                                                                                                                                                                                                                                                              |
|                      | Weight                     | ca. 2.99 kg                                                                                                                                                                                                                                                       |
| Operating conditions | Operating temperature      | 5 °C to 45 °C                                                                                                                                                                                                                                                     |
|                      | Operating air humidity     | up to 80 %, non-condensing                                                                                                                                                                                                                                        |
|                      | Area of application        | Interior                                                                                                                                                                                                                                                          |
|                      | Maximum operating altitude | 3048m above sea level                                                                                                                                                                                                                                             |
|                      | Storage temperature        | -10 °C to 55 °C                                                                                                                                                                                                                                                   |
|                      | Storage air humidity       | up to 85 %, non-condensing                                                                                                                                                                                                                                        |
|                      | MTBF                       | 170000 h at 25°C                                                                                                                                                                                                                                                  |
|                      | Conformities               | CE compliant (see downloads)<br>UKCA compliant (see downloads)<br>FCC compliant (see manual)<br>TAA compliant (see downloads)<br>EAC compliant (see downloads)<br>RoHS compliant (see downloads)<br>WEEE (reg. no. DE30763240)<br>REACH compliant (see downloads) |
| Power supply         | Input voltage              | 100-240 VAC                                                                                                                                                                                                                                                       |
|                      | Input frequency            | 60-50 Hz                                                                                                                                                                                                                                                          |
|                      | Current consumption        | 0.7-0.3 A                                                                                                                                                                                                                                                         |
|                      | Power consumption max.     | 30.7 W                                                                                                                                                                                                                                                            |
|                      | Heat output max.           | 17.7 W                                                                                                                                                                                                                                                            |
| Power supply 2       | Input voltage              | 100-240 VAC                                                                                                                                                                                                                                                       |



|  |                        |           |
|--|------------------------|-----------|
|  | Input frequency        | 60-50 Hz  |
|  | Current consumption    | 0.7-0.3 A |
|  | Power consumption max. | 30.7 W    |
|  | Heat output max.       | 17.7 W    |



## MORE VARIANTS

| Description                                                                                             | Article number |
|---------------------------------------------------------------------------------------------------------|----------------|
| <b>DL-Vision(M)-AR-CON</b><br>Console module to receive Dual-Link-DVI signals via fiber multimode       | A1220050       |
| <b>DL-Vision(M)-MC2-AR-CON</b><br>Console module to receive Dual-Link-DVI signals via fiber multimode   | A1220054       |
| <b>DL-Vision(M)-MC2-ARU2-CON</b><br>Console module to receive Dual-Link-DVI signals via fiber multimode | A1220226       |

# CONTACT

## WE ARE HERE FOR YOU!

If you have any further questions, we are looking forward to advising you on your individual project requirements.

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