

# Technical data

## General features

| DP1.2-VISIONXG-FIBER SERIES |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Graphics                    | Format:                            | DisplayPort (DP 1.2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                             | Colour depth:                      | 24 Bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                             | Pixel encoding:                    | RGB 4:4:4 with24bpp/8bpc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                             | Videobandwidth:                    | max. 600 MP/s, DisplayPort 4 Lanes, LBR, HBR, HBR2, SingleStreamTransport (SST)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                             | Max. resolution per video channel: | <div> <div> 2560 × 1600 @ 60Hz 4096 × 2160 @ 60Hz (4Kp60Hz) </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                             | Exemplary resolutions:             | <div> <div>per video channel:</div> <div> <div>1920 × 1200 @ 60Hz</div> <div>2048 × 2048 @ 60Hz (2K × 2K)</div> <div>2560 × 1600 @ 60Hz</div> <div>3840 × 2160 @ 60Hz (Ultra HD/60Hz)</div> <div>4096 × 2160 @ 60Hz (4Kp60Hz)</div> </div> <div>when using two video channels (MC variants only):</div> <div> <div>7680 × 4320 @ 30Hz (8K)</div> </div> <div>when using two video channels (MC variants only):</div> <div> <div>7680 × 4320 @ 60Hz (8K)</div> </div> <div>nVidia 3D-Vision 120Hz:</div> <div> <div>1680 × 1050 @ 120Hz</div> </div> <div> <div>› further standardised resolutions possible</div> </div> </div> |
|                             | Vertical frequency:                | 24 Hz to 200 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                             | Horizontal frequency:              | 25 kHz to 185 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                             | Audio                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                             | ‣ DisplayPort Digital              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Audio                       | Transmission type:                 | 2 channel LPCM, stereo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                             | Resolutions:                       | 16/20/24 bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                             | Sampling rates:                    | up to 48 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                             | Transmission type:                 | analog, stereo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| USB                         | Resolution:                        | 24 bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                             | Sampling rate:                     | 96 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                             | Bandwidth:                         | 22 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                             | Specification:                     | USB 2.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| RS232                       | ‣ ARU2 variant                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                             | Transmission type:                 | transparent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                             | Transmission rate:                 | max. 480 Mbit/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| RS232                       | Transmission type:                 | transparent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                             | Transmission rate:                 | max. 230,400 bps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                             | Transmitted signals:               | TxD, RxD, DTR, DSR, RTS, CTS, DCD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| DP1.2-VISIONXG-FIBER SERIES |               |                        |
|-----------------------------|---------------|------------------------|
| Main power supply           | Type:         | internal power pack    |
|                             | Connection:   | IEC plug(IEC-320 C14)  |
|                             | Voltage:      | AC100-240V/60-50Hz     |
| Redundant power supply      | Type:         | internal power pack    |
|                             | Connection:   | IEC plug (IEC-320 C14) |
|                             | Voltage:      | AC100-240V/60-50Hz     |
| Operating environment       | Temperature:  | +5 to +45 °C           |
|                             | Air humidity: | < 80%, non-condensing  |

## General module features

| DP1.2-VISIONXG-FIBER-CPU   COMPUTER MODULE |                                       |                                                                          |
|--------------------------------------------|---------------------------------------|--------------------------------------------------------------------------|
| <b>Interfaces for console</b>              | Monitor:<br>‣ per video channel       | 1 × DisplayPort socket                                                   |
|                                            | Keyboard:                             | 1 × PS/2 socket<br>1 × USB-A socket                                      |
|                                            | Mouse:                                | 1 × USB-A socket                                                         |
| <b>Interfaces to computer</b>              | Video:                                | 1 × DisplayPort socket                                                   |
|                                            | PS/2 keyboard:                        | 1 × PS/2 socket                                                          |
|                                            | USB keyboard/mouse:                   | 1 × USB-B socket                                                         |
|                                            | Audio:                                | 1 × 3.5-mm jack socket (Line In)<br>1 × 3.5-mm jack socket (Line Out)    |
|                                            | USB (transparent):<br>‣ Variant -ARU2 | 1 × USB-B socket                                                         |
|                                            | RS232:                                | 1 × D-Sub9 socket                                                        |
| <b>Interfaces for transmission</b>         | Video and input devices:              | ‣ see specific features                                                  |
| <b>Other interfaces</b>                    | Connection to network:                | 2 × RJ45 socket                                                          |
| DP1.2-VISIONXG-FIBER-CON   USER MODULE     |                                       |                                                                          |
| <b>Schnittstellen für Arbeitsplatz</b>     | Monitor:<br>‣ per video channel       | 1 × DisplayPort socket                                                   |
|                                            | Keyboard:                             | 1 × PS/2 socket<br>1 × USB-A socket                                      |
|                                            | Mouse:                                | 1 × USB-A socket                                                         |
|                                            | Generic:                              | 1 × USB-A socket                                                         |
|                                            | Audio:                                | 1 × 3.53.5-mm jack socket (Micro In)<br>1 × 3.5-mm jack socket (Speaker) |
|                                            | USB:<br>‣ Variant -ARU2               | 4 × USB-A socket                                                         |
|                                            | RS232:                                | 1 × D-Sub9 socket                                                        |
| <b>Interfaces for transmission</b>         | Video and input devices:              | ‣ see specific features                                                  |
| <b>Other interfaces</b>                    | Connection to network:                | 2 × RJ45 socket                                                          |

## Specific variant features

| DP1.2-VISIONXG-FIBER-AR-CPU   COMPUTER MODULE   |                          |                             |
|-------------------------------------------------|--------------------------|-----------------------------|
| Interfaces for transmission                     | Video and input devices: | 2 × LWL LC-Duplex socket    |
| Current consumption                             | maximum:                 | 100-240VAC/60-50Hz/0.7-0.3A |
| Power consumption                               | maximum:                 | 31,7 W                      |
| Casing                                          | Material:                | anodised aluminium          |
|                                                 | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                                 | Weight:                  | approx. 2.6 kg              |
| DP1.2-VISIONXG-FIBER-AR-CON   USER MODULE       |                          |                             |
| Interfaces for transmission                     | Video and input devices: | 2 × LWL LC-Duplex socket    |
| Current consumption                             | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| Power consumption                               | maximum:                 | 40,1 W                      |
| Casing                                          | Material:                | anodised aluminium          |
|                                                 | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                                 | Weight:                  | approx. 2.6 kg              |
| DP1.2-VISIONXG-FIBER-ARU2-CPU   COMPUTER MODULE |                          |                             |
| Interfaces for transmission                     | Video and input devices: | 2 × LWL LC-Duplex socket    |
| Current consumption                             | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| Power consumption                               | maximum:                 | 32,7 W                      |
| Casing                                          | Material:                | anodised aluminium          |
|                                                 | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                                 | Weight:                  | approx. 2.6 kg              |
| DP1.2-VISIONXG-FIBER-ARU2-CON   USER MODULE     |                          |                             |
| Interfaces for transmission                     | Video and input devices: | 2 × LWL LC-Duplex socket    |
| Current consumption                             | maximum:                 | 100-240VAC/60-50Hz/0.8-0.4A |
| Power consumption                               | maximum:                 | 52,5 W                      |
| Casing                                          | Material:                | anodised aluminium          |
|                                                 | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                                 | Weight:                  | approx. 2.6 kg              |

**DP1.2-VISIONXG-FIBER-MC2-AR-CPU | COMPUTER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 4 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>           | maximum:                 | 41,2 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                    | Weight:                  | approx. 2.7 kg              |

**DP1.2-VISIONXG-FIBER-MC2-AR-CON | USER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 4 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>           | maximum:                 | 48,5 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                    | Weight:                  | approx. 2.7 kg              |

**DP1.2-VISIONXG-FIBER-MC2-ARU2-CPU | COMPUTER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 4 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>           | maximum:                 | 42,1 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                    | Weight:                  | approx. 2.7 kg              |

**DP1.2-VISIONXG-FIBER-MC2-ARU2-CON | USER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 4 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>           | maximum:                 | 60,9 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 210 mm       |
|                                    | Weight:                  | approx. 2.7 kg              |

| DP1.2-VISIONXG-FIBER-MC3-AR-CPU   COMPUTER MODULE   |                          |                             |
|-----------------------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b>                  | Video and input devices: | 6 × LWL LC-Duplex socket    |
| <b>Current consumption</b>                          | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>                            | maximum:                 | 65,4 W                      |
| <b>Casing</b>                                       | Material:                | anodised aluminium          |
|                                                     | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                                     | Weight:                  | approx. 2,9 kg              |
| DP1.2-VISIONXG-FIBER-MC3-AR-CON   USER MODULE       |                          |                             |
| <b>Interfaces for transmission</b>                  | Video and input devices: | 6 × LWL LC-Duplex socket    |
| <b>Current consumption</b>                          | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>                            | maximum:                 | 73,0 W                      |
| <b>Casing</b>                                       | Material:                | anodised aluminium          |
|                                                     | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                                     | Weight:                  | approx. 3,3 kg              |
| DP1.2-VISIONXG-FIBER-MC3-ARU2-CPU   COMPUTER MODULE |                          |                             |
| <b>Interfaces for transmission</b>                  | Video and input devices: | 6 × LWL LC-Duplex socket    |
| <b>Current consumption</b>                          | maximum:                 | 100-240VAC/60-50Hz/0.7-0.4A |
| <b>Power consumption</b>                            | maximum:                 | 67,5 W                      |
| <b>Casing</b>                                       | Material:                | anodised aluminium          |
|                                                     | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                                     | Weight:                  | approx. 2,9 kg              |
| DP1.2-VISIONXG-FIBER-MC3-ARU2-CON   USER MODULE     |                          |                             |
| <b>Interfaces for transmission</b>                  | Video and input devices: | 6 × LWL LC-Duplex socket    |
| <b>Current consumption</b>                          | maximum:                 | 100-240VAC/60-50Hz/0.8-0.4A |
| <b>Power consumption</b>                            | maximum:                 | 93,3 W                      |
| <b>Casing</b>                                       | Material:                | anodised aluminium          |
|                                                     | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                                     | Weight:                  | approx. 3,4 kg              |

**DP1.2-VISIONXG-FIBER-MC4-AR-CPU | COMPUTER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 8 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/1.0-0.5A |
| <b>Power consumption</b>           | maximum:                 | 77,3 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                    | Weight:                  | approx. 3,6 kg              |

**DP1.2-VISIONXG-FIBER-MC4-AR-CON | USER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 8 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/1.1-0.5A |
| <b>Power consumption</b>           | maximum:                 | 83,5 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                    | Weight:                  | approx. 3,6 kg              |

**DP1.2-VISIONXG-FIBER-MC4-ARU2-CPU | COMPUTER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 8 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/1.0-0.5A |
| <b>Power consumption</b>           | maximum:                 | 81,9 W                      |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                    | Weight:                  | approx. 3,7 kg              |

**DP1.2-VISIONXG-FIBER-MC4-ARU2-CON | USER MODULE**

|                                    |                          |                             |
|------------------------------------|--------------------------|-----------------------------|
| <b>Interfaces for transmission</b> | Video and input devices: | 8 × LWL LC-Duplex socket    |
| <b>Current consumption</b>         | maximum:                 | 100-240VAC/60-50Hz/1.1-0.5A |
| <b>Power consumption</b>           | maximum:                 | 105,0 W                     |
| <b>Casing</b>                      | Material:                | anodised aluminium          |
|                                    | Dimensions (W × H × D):  | 435 mm × 1 U × 284,5 mm     |
|                                    | Weight:                  | approx. 3,7 kg              |

## Features of the transmission modules

### Multimode transmission modules

| GENERAL FEATURES    |                                                |                           |
|---------------------|------------------------------------------------|---------------------------|
| Data transmission   | Type:                                          | Optical fibres (2 fibres) |
|                     | Type of interface:                             | LC-Duplex                 |
|                     | Wavelength (λ):                                | 850 nm                    |
| Cable length (max.) | Multimode 50/125µm, 4700MHz*km, OM4:           | 400 meters                |
|                     | Multimode 50/125 µm, 2000 MHz*km, OM3:         | 300 meters                |
|                     | Multimode 50/125 µm, 500 MHz*km, OM2:          | 82 meters                 |
|                     | Multimode 50/125 µm, 400MHz*km:                | 66 meters                 |
|                     | Multimode 62,5/125 µm, 200 MHz*km, OM1:        | 33 meters                 |
|                     | Multimode 62,5/125 µm, 160 MHz*km, FDDI-grade: | 26 meters                 |

### Singlemode transmission modules

| GENERAL FEATURES    |                                |                              |
|---------------------|--------------------------------|------------------------------|
| Data transmission   | Type:                          | Optical fibres (2 fibres)    |
|                     | Type of interface:             | LC-Duplex                    |
|                     | Wavelength (λ):                | 1310 nm (1260 nm to 1355 nm) |
| Cable length (max.) | Singlemode 9/125µm, class OS1: | 10 kilometers                |