

# VGA KVM Extender

# CATVision 7.2

## KVM Extender

Extender systems to bridge IT-distances



**Leading the way in digital KVM**



## Leading the Way in digital KVM

Guntermann & Drunck GmbH has been established in 1985 and is named after its founders. Over 25 years have since past, and we are now a leading manufacturer of digital and analog KVM switching systems.

As an owner-managed company we work with a broad range in both digital and analog KVM closely with the marketplace and make our decisions with and in the interests of our customers. It is our philosophy to meet our customers while making decisions, to accompany them in the process and ensure that they achieve their goals.

We can do this because as a medium sized company we have short communication paths and all core competencies are in house – from development through to production. This way we can even make the impossible possible at times. If it is thanks to the modularity of the products or by implementing a customised solution. We orient ourselves towards the needs of the customer – and not the other way round.

Organisations, service providers and companies of all sizes managing numerous computers, servers and other network devices trust the comprehensive advice and service provided by Guntermann & Drunck GmbH.

Thanks to these different fields of specialisation, the demands placed on the products are many and are manifold. Our products have to provide a long-life service, be secure, uncomplicated, user-friendly, understandable and adaptable.

The KVM extender system CATVision extends the following signals:

- keyboard/mouse
- VGA
- audio
- RS232
- USB 1.1 or USB 2.0

The system consists of a computer module (transmitter) and a user module (receiver) and facilitates the remote operation of one computer. You can connect a console to each module.

CATVision transmits uncompressed signals via CAT x cables (x = 5, 6, 7) up to 300 m. The devices are available as variants displaying 1, 2, 3 or 4 video channels.



above: CATVision-MC4-ARU2D-CPU computer module  
below: CATVision-MC4-ARU2-CON user module

## Highlights

### Video

- single and multi channel variants
- automatic video optimisation

### Operation

- at both modules console with all video channels
- access protection and user management which can be switched off

### Signals

- transmission up to 300 m via CAT x cables at maximum resolution
- PS/2 and USB keyboard/mouse support
- support of special keyboards

### Safety

- redundant power supply

## Features

### Video

- resolutions up to 1920 × 1440 @ 75 Hz or 2k x 2k @ 60 Hz (depending on cable length)
- video bandwidth up to 250 MHz
- automatic video optimisation
- Individual Video Tuning (IVT+) via OSD
- delay compensation (skew) up to 50 ns for all colours via OSD (optional)

### Transmission

- up to 300 meters (depending on resolution)
- optional up to 200 metres for USB 1.1 (optional)
- up to 100 meters for USB 2.0 (optional)
- via CAT-x cable (x = 5e, 6, 7)
- bidirectional audio and RS232 signals (optional)
- transparent transmission of USB 1.1 or 2.0 signals (optional)

### Device

- internal power pack and redundant power supply (redundant, external power pack; optional)
- full keyboard/mouse emulation
- supports USB and PS/2 keyboard/mouse (including mixed mode)
- available as desktop and 19" variant

### System upgrade

- all system components ready for flash upgrade (master + slave)

## Variants

### Design

- available as desktop (DT) or rack mount (RM) variant
- twin variant combines two identical CATVision modules behind one panel

### Video channels

- single-channel, multi-channel 2, 3 and 4

## Expansion

### CV-Power

CV-Power enables the user to remotely turn on/off a computer (reset and ATX power switching). A slot card is implemented in the computer and connected to the computer module. The customer provides the operating hardware at remote side (button or similar). The hardware is connected to the user module.

The function is available for all CATVision variants. For further details, please contact our sales team.

### Delay Compensation

The delay compensation is only applied in the computer module. It automatically or manually adjusts the runtime differences of cables up to 50 ns. Thanks to this adjustment, the colours „reach“ the display at the same time.

We recommend applying the delay compensation for cable lengths over 100 m. When using the K-C5-OIL cable the compensation is obligatory. For cables other than G&D ones it may be useful to apply the delay compensation for shorter transmission lengths.

## Installation

Link the computer to the back of the CATVision transmitter. Distinctive cables connect the computer's keyboard, video, mouse, audio, and USB interfaces to the CATVision computer module.

Installing the user console is just as easy: simply connect the operating hardware with the corresponding interfaces of the CATVision receiver.

Use the existing CAT-x cabling structure to link transmitter and receiver.

Feel free to download the CATVision manual to find out more details about the start-up.

## Note

Please note that not all CAT-x cables can transmit the max. distance and resolution on the highest quality. Please do not hesitate to contact us in case of doubt.

# CATVision Single-Channel



left: CATVision-ARU2D-CPU computer module  
right: CATVision-ARU2-CON user module

|                              | Computer module  | User module                              |
|------------------------------|--|--|
| <b>Video</b>                 |  |  |
| Number of monitors           | 1  |  |
| Signal type/video            | analog video   |  |
| Analog resolution            | up to 1920 x 1440 @ 75 Hz or 2k x 2k @ 60 Hz (depending on cable length) |  |
| Standards                    | DDC support for DVI  |  |
| Video bandwidth              | 250 MHz  |  |
| Interfaces for user console  | 1 x D-sub HD 15 socket   |  |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
| <b>Keyboard/Mouse</b>        |  |  |
| Interfaces for user console  | 2 x Mini-DIN 6 socket  |  |
|                              |  | 2 x USB-A socket                         |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
|                              | 1 x USB-B socket   |  |
| <b>Audio</b>                 |  |  |
| Design                       | internal   |  |
| Sampling rate                | 48 kHz   |  |
| Resolution                   | 18 bit digital   |  |
| Bandwidth                    | 22 kHz   |  |
| Microphone preamplification  |  | 20 dB                                    |
| Interfaces for user console  |  | 3 x 3.5 mm jack plug (speaker, micro in) |
| Interfaces to computer       | 2 x 3.5 mm jack plug (line in, line out)                                 |  |
| <b>RS232</b>                 |  |  |
| Design                       | internal   |  |
| Transmission rate 300 m      | max. 38,400 bit/s  |  |
| Transmission rate 100 m      | max. 57,600 bit/s  |  |
| Transmittable signals        | RxD, TxD, RTS, CTS, DTR, DSR   |  |
| Interfaces for user console  |  | 1 x D-Sub 9 plug                         |
| Interfaces to computer       | 1 x D-Sub 9 plug   |  |

|                               |   |                  |
|-------------------------------|---|------------------|
| <b>Transparent USB 1.1</b>    |   |                  |
| Design                        | internal  |                  |
| Transmission length           | up to 200 m   |                  |
| USB power supply              | high power devices up to 500 mA                                 |                  |
| USB transmission rate         | up to 12 Mbit/s   |                  |
| Interfaces for user console   |   | 4 x USB-A socket |
| Interfaces to computer        | 1 x USB-B socket (both for keyboard/mouse)                      |                  |
| <b>Transparent USB 2.0</b>    |   |                  |
| Design                        | internal  |                  |
| Transmission length           | up to 100 m   |                  |
| USB power supply              | high power devices up to 500 mA                                 |                  |
| USB transmission rate         | up to 480 Mbit/s  |                  |
| Interfaces for user console   |   | 4 x USB-A socket |
| Interfaces to computer        | 1 x USB-B socket  |                  |
| <b>Transmission</b>           |   |                  |
| Type of cable connection      | dedicated CAT-x link  |                  |
| Transmission cable type       | CAT-x cable   |                  |
| Transmission length           | up to 300 m at max. resolution                                  |                  |
| Connection                    | 1 x RJ45 socket   |                  |
| Connection with USB 2.0       | 1 x RJ45 socket   |                  |
| No. of CAT-x cables           | 1   |                  |
| Audio - RS232 transmission    | no additional CAT-x cable                                       |                  |
| USB 1.1 transmission          | no additional CAT-x cable                                       |                  |
| USB 2.0 transmission          | 1 additional CAT-x cable  |                  |
| <b>Main power supply</b>      |   |                  |
| Type                          | internal power pack   |                  |
| Connection                    | 1 x IEC plug  |                  |
| Voltage                       | AC100-240V/60-50Hz  |                  |
|                               | 140-80 mA   | 240-100 mA       |
| USB 2.0 variant               | 0.2-0.1A  | 0.5-0.2A         |
| <b>Redundant power supply</b> |   |                  |
| Type                          | external power pack   |                  |
| Connection                    | Mini-DIN 4 socket   |                  |
| Voltage                       | +12VDC/0.7A   | +12VDC/0.7A      |
| USB 2.0 variant               | +12VDC/0.7A   | +12VDC/1.8A      |
| <b>Casing</b>                 |   |                  |
| Material                      | anodised aluminium  |                  |
| Desktop (W x H x D)           | 210 x 44 x 210 mm   |                  |
| USB 2.0 variant               | 270 x 44 x 210 mm   |                  |
| Rackmount (W x H x D)         | 19" x 1 U x 210 mm  |                  |
| Weight                        | approx. 1.2 kg  | approx. 1.1 kg   |
| USB 2.0 variant               | approx. 1.5 kg  |                  |
| <b>Update</b>                 |   |                  |
| Process                       | with wizard at service socket of computer module or user module |                  |
| Connection                    | 1 x 2.5 mm jack plug  |                  |
| <b>Operating environment</b>  |   |                  |
| Temperature                   | +5 to +40 °C  |                  |
| Air humidity                  | 20 - 80% non-condensing   |                  |
| Conformity                    | CE, RoHS  |                  |

## CATVision Multi-Channel 2



above: CATVision-MC2-ARU2-CPU Computer module  
 below: CATVision-MC2-ARU2-CON User module  
 right: CATVision-MC2-ARU-CON User module

|                              | Computer module  | User module                              |
|------------------------------|--|--|
| <b>Video</b>                 |  |  |
| Number of monitors           | 2  |  |
| Signal type/video            | analog video   |  |
| Analog resolution            | up to 1920 x 1440 @ 75 Hz or 2k x 2k @ 60 Hz (depending on cable length) |  |
| Standards                    | DDC support for DVI  |  |
| Video bandwidth              | 250 MHz  |  |
| Interfaces for user console  | 2 x D-sub HD 15 socket   |  |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
| <b>Keyboard/Mouse</b>        |  |  |
| Interfaces for user console  | 2 x Mini-DIN 6 socket  |  |
|                              |  | 2 x USB-A socket                         |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
|                              | 1 x USB-B socket   |  |
| <b>Audio</b>                 |  |  |
| Design                       | internal   |  |
| Sampling rate                | 48 kHz   |  |
| Resolution                   | 18 bit digital   |  |
| Bandwidth                    | 22 kHz   |  |
| Microphone preamplification  |  | 20 dB                                    |
| Interfaces for user console  |  | 3 x 3.5 mm jack plug (speaker, micro in) |
| Interfaces to computer       | 2 x 3.5 mm jack plug (line in, line out)                                 |  |
| <b>RS232</b>                 |  |  |
| Design                       | internal   |  |
| Transmission rate 300 m      | max. 38,400 bit/s  |  |
| Transmission rate 100 m      | max. 57,600 bit/s  |  |
| Transmittable signals        | RxD, TxD, RTS, CTS, DTR, DSR   |  |
| Interfaces for user console  |  | 1 x D-Sub 9 plug                         |
| Interfaces to computer       | 1 x D-Sub 9 plug   |  |

|                               |   |                   |
|-------------------------------|---|-------------------|
| <b>Transparent USB 1.1</b>    |   |                   |
| Design                        | internal  |                   |
| Transmission length           | up to 200 m   |                   |
| USB power supply              | high power devices up to 500 mA                                 |                   |
| USB transmission rate         | up to 12 Mbit/s   |                   |
| Interfaces for user console   |   | 4 × USB-A socket  |
| Interfaces to computer        | 1 × USB-B socket (both for keyboard/mouse)                      |                   |
| <b>Transparent USB 2.0</b>    |   |                   |
| Design                        | internal  |                   |
| Transmission length           | up to 100 m   |                   |
| USB power supply              | high power devices up to 500 mA                                 |                   |
| USB transmission rate         | up to 480 Mbit/s  |                   |
| Interfaces for user console   |   | 4 × USB-A socket  |
| Interfaces to computer        | 1 × USB-B socket  |                   |
| <b>Transmission</b>           |   |                   |
| Type of cable connection      | dedicated CAT-x link  |                   |
| Transmission cable type       | CAT-x cable   |                   |
| Transmission length           | up to 300 m at max. resolution                                  |                   |
| Connection                    | 2 × RJ45 socket   |                   |
| Connection with USB 2.0       | 1 × RJ45 socket   |                   |
| No. of CAT-x cables           | 2   |                   |
| Audio - RS232 transmission    | no additional CAT-x cable                                       |                   |
| USB 1.1 transmission          | no additional CAT-x cable                                       |                   |
| USB 2.0 transmission          | 1 additional CAT-x cable  |                   |
| <b>Main power supply</b>      |   |                   |
| Type                          | internal power pack   |                   |
| Connection                    | 1 × IEC plug  |                   |
| Voltage                       | AC100-240V/60-50Hz  |                   |
|                               | 0.3-0.2A  | 0.3-0.2A          |
| USB 2.0 variant               | 0.3-0.2A  | 0.5-0.2A          |
| <b>Redundant power supply</b> |   |                   |
| Type                          | external power pack   |                   |
| Connection                    | Mini-DIN 4 socket   |                   |
| Voltage                       | +12VDC/1.1A   | +12VDC/1.0A       |
| USB 2.0 variant               | +12VDC/1.2A   | +12VDC/2.0A       |
| <b>Casing</b>                 |   |                   |
| Material                      | anodised aluminium  |                   |
| Desktop (W × H × D)           | 435 × 44 × 210 mm   | 270 × 44 × 210 mm |
| USB 2.0 variant               | 435 × 44 × 210 mm   |                   |
| Rackmount (W × H × D)         | 19" × 1 U × 210 mm  |                   |
| Weight                        | approx. 1.8 kg  | approx. 1.3 kg    |
| USB 2.0 variant               | approx. 1.5 kg  |                   |
| <b>Update</b>                 |   |                   |
| Process                       | with wizard at service socket of computer module or user module |                   |
| Connection                    | 1 × 2.5 mm jack plug  |                   |
| <b>Operating environment</b>  |   |                   |
| Temperature                   | +5 to +40 °C  |                   |
| Air humidity                  | 20 - 80% non-condensing   |                   |
| Conformity                    | CE, RoHs  |                   |



# CATVision Multi-Channel 3



left: CATVision-MC3-ARU2D-CPU Computer module  
 right: CATVision-MC3-ARU2-CON User module

|                              | Computer module  | User module      |
|------------------------------|--|------------------|
| <b>Video</b>                 |  |                  |
| Number of monitors           | 3  |                  |
| Signal type/video            | analog video   |                  |
| Analog resolution            | up to 1920 x 1440 @ 75 Hz or 2k x 2k @ 60 Hz (depending on cable length) |                  |
| Standards                    | DDC support for DVI  |                  |
| Video bandwidth              | 250 MHz  |                  |
| Interfaces for user console  | 3 x D-sub HD 15 socket   |                  |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |                  |
| <b>Keyboard/Mouse</b>        |  |                  |
| Interfaces for user console  | 2 x Mini-DIN 6 socket  |                  |
|                              |  | 2 x USB-A socket |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |                  |
|                              | 1 x USB-B socket   |                  |
| <b>Audio</b>                 |  |                  |
| Design                       | internal   |                  |
| Sampling rate                | 48 kHz   |                  |
| Resolution                   | 18 bit digital   |                  |
| Bandwidth                    | 22 kHz   |                  |
| Microphone preamplification  | 20 dB  |                  |
| Interfaces for user console  | 3 x 3.5 mm jack plug (speaker, micro in)                                 |                  |
| Interfaces to computer       | 2 x 3.5 mm jack plug (line in, line out)                                 |                  |
| <b>RS232</b>                 |  |                  |
| Design                       | internal   |                  |
| Transmission rate 300 m      | max. 38,400 bit/s  |                  |
| Transmission rate 100 m      | max. 57,600 bit/s  |                  |
| Transmittable signals        | RxD, TxD, RTS, CTS, DTR, DSR   |                  |
| Interfaces for user console  | 1 x D-Sub 9 plug   |                  |
| Interfaces to computer       | 1 x D-Sub 9 plug   |                  |

|                             |   |                  |
|-----------------------------|---|------------------|
| Transparent USB 1.1         |   |                  |
| Design                      | internal  |                  |
| Transmission length         | up to 200 m   |                  |
| USB power supply            | high power devices up to 500 mA                                 |                  |
| USB transmission rate       | up to 12 Mbit/s   |                  |
| Interfaces for user console |   | 4 × USB-A socket |
| Interfaces to computer      | 1 × USB-B socket (both for keyboard/mouse)                      |                  |
| Transmission                |   |                  |
| Type of cable connection    | dedicated CAT-x link  |                  |
| Transmission cable type     | CAT-x cable   |                  |
| Transmission length         | up to 300 m at max. resolution                                  |                  |
| Connection                  | 3 × RJ45 socket   |                  |
| Connection with USB 2.0     | 1 × RJ45 socket   |                  |
| No. of CAT-x cables         | 3   |                  |
| Audio - RS232 transmission  | no additional CAT-x cable                                       |                  |
| USB 1.1 transmission        | no additional CAT-x cable                                       |                  |
| Main power supply           |   |                  |
| Type                        | internal power pack   |                  |
| Connection                  | 1 × IEC plug  |                  |
| Voltage                     | AC100-240V/60-50Hz  |                  |
|                             | 0.4-0.2A  | 0.5-0.3A         |
| Redundant power supply      |   |                  |
| Type                        | external power pack   |                  |
| Connection                  | Mini-DIN 4 socket   |                  |
| Voltage                     | +12VDC/1.2A   | +12VDC/2.3A      |
| Casing                      |   |                  |
| Material                    | anodised aluminium  |                  |
| Desktop (W × H × D)         | 435 × 44 × 210 mm   |                  |
| Rackmount (W × H × D)       | 19" × 1 U × 210 mm  |                  |
| Weight                      | approx. 2.0 kg  | approx. 1.9 kg   |
| Update                      |   |                  |
| Process                     | with wizard at service socket of computer module or user module |                  |
| Connection                  | 1 × 2.5 mm jack plug  |                  |
| Operating environment       |   |                  |
| Temperature                 | +5 to +40 °C  |                  |
| Air humidity                | 20 - 80% non-condensing   |                  |
| Conformity                  | CE, RoHs  |                  |

# CATVision Multi-Channel 4



links: CATVision-MC4-ARU2-CPU computer module  
 rechts: CATVision-MC4-ARU2-CON user module

|                              | Computer module  | User module                              |
|------------------------------|--|--|
| <b>Video</b>                 |  |  |
| Number of monitors           | 4  |  |
| Signal type/video            | analog video   |  |
| Analog resolution            | up to 1920 x 1440 @ 75 Hz or 2k x 2k @ 60 Hz (depending on cable length) |  |
| Standards                    | DDC support for DVI  |  |
| Video bandwidth              | 250 MHz  |  |
| Interfaces for user console  | 4 x D-sub HD 15 socket   |  |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
| <b>Keyboard/Mouse</b>        |  |  |
| Interfaces for user console  | 2 x Mini-DIN 6 socket  |  |
|                              |  | 2 x USB-A socket                         |
| Interfaces to computer (KVM) | 1 x 20-pin MDR socket  |  |
|                              | 1 x USB-B socket   |  |
| <b>Audio</b>                 |  |  |
| Design                       | internal   |  |
| Sampling rate                | 48 kHz   |  |
| Resolution                   | 18 bit digital   |  |
| Bandwidth                    | 22 kHz   |  |
| Microphone preamplification  |  | 20 dB                                    |
| Interfaces for user console  |  | 3 x 3.5 mm jack plug (speaker, micro in) |
| Interfaces to computer       | 2 x 3.5 mm jack plug (line in, line out)                                 |  |
| <b>RS232</b>                 |  |  |
| Design                       | internal   |  |
| Transmission rate 300 m      | max. 38,400 bit/s  |  |
| Transmission rate 100 m      | max. 57,600 bit/s  |  |
| Transmittable signals        | RxD, TxD, RTS, CTS, DTR, DSR   |  |
| Interfaces for user console  |  | 1 x D-Sub 9 plug                         |
| Interfaces to computer       | 1 x D-Sub 9 plug   |  |

|                               |   |                  |
|-------------------------------|---|------------------|
| <b>Transparent USB 1.1</b>    |   |                  |
| Design                        | internal  |                  |
| Transmission length           | up to 200 m   |                  |
| USB power supply              | high power devices up to 500 mA                                 |                  |
| USB transmission rate         | up to 12 Mbit/s   |                  |
| Interfaces for user console   |   | 4 × USB-A socket |
| Interfaces to computer        | 1 × USB-B socket (both for keyboard/mouse)                      |                  |
| <b>Transparent USB 2.0</b>    |   |                  |
| Design                        | internal  |                  |
| Transmission length           | up to 100 m   |                  |
| USB power supply              | high power devices up to 500 mA                                 |                  |
| USB transmission rate         | up to 480 Mbit/s  |                  |
| Interfaces for user console   |   | 4 × USB-A socket |
| Interfaces to computer        | 1 × USB-B socket  |                  |
| <b>Transmission</b>           |   |                  |
| Type of cable connection      | dedicated CAT-x link  |                  |
| Transmission cable type       | CAT-x cable   |                  |
| Transmission length           | up to 300 m at max. resolution                                  |                  |
| Connection                    | 4 × RJ45 socket   |                  |
| Connection with USB 2.0       | 1 × RJ45 socket   |                  |
| No. of CAT-x cables           | 4   |                  |
| Audio - RS232 transmission    | no additional CAT-x cable                                       |                  |
| USB 1.1 transmission          | no additional CAT-x cable                                       |                  |
| USB 2.0 transmission          | 1 additional CAT-x cable  |                  |
| <b>Main power supply</b>      |   |                  |
| Type                          | internal power pack   |                  |
| Connection                    | 1 × IEC plug  |                  |
| Voltage                       | AC100-240V/60-50Hz  |                  |
|                               | 0.4-0.2A  | 0.4-0.2A         |
| USB 2.0 Variant               | 0.5-0.2A  | 0.6-0.3A         |
| <b>Redundant power supply</b> |   |                  |
| Type                          | external power pack   |                  |
| Connection                    | Mini-DIN 4 socket   |                  |
| Voltage                       | +12VDC/1.7A   | +12VDC/1.5A      |
| USB 2.0 Variant               | +12VDC/1.8A   | +12VDC/2.6A      |
| <b>Casing</b>                 |   |                  |
| Material                      | anodised aluminium  |                  |
| Desktop (W × H × D)           | 435 × 44 × 210 mm   |                  |
| Rackmount (W × H × D)         | 19" × 1 U × 210 mm  |                  |
| Weight                        | approx. 2.0 kg  |                  |
| <b>Update</b>                 |   |                  |
| Process                       | with wizard at service socket of computer module or user module |                  |
| Connection                    | 1 × 2.5 mm jack plug  |                  |
| <b>Operating environment</b>  |   |                  |
| Temperature                   | +5 to +40 °C  |                  |
| Air humidity                  | 20 - 80% non-condensing   |                  |
| Conformity                    | CE, RoHs  |                  |

## List of Item Numbers Single-Channel

| Item No. | Computer modules         | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
|----------|--------------------------|-------|-------|---------|---------|-------|---------|------------|
| A1110003 | CATVision-CPU            |       |       |         |         |       | DT      |            |
| A1110004 | CATVision-CPU-RM         |       |       |         |         |       |         | RM         |
| A1110005 | CATVision-D-CPU          |       |       |         |         | D     | DT      |            |
| A1110006 | CATVision-D-CPU-RM       |       |       |         |         | D     |         | RM         |
| A1110007 | CATVision-R-CPU          |       | R     |         |         |       | DT      |            |
| A1110008 | CATVision-R-CPU-RM       |       | R     |         |         |       |         | RM         |
| A1110009 | CATVision-RD-CPU         |       | R     |         |         | D     | DT      |            |
| A1110010 | CATVision-RD-CPU-RM      |       | R     |         |         | D     |         | RM         |
| A1110011 | CATVision-AR-CPU         | A     | R     |         |         |       | DT      |            |
| A1110012 | CATVision-AR-CPU-RM      | A     | R     |         |         |       |         | RM         |
| A1110013 | CATVision-ARD-CPU        | A     | R     |         |         | D     | DT      |            |
| A1110014 | CATVision-ARD-CPU-RM     | A     | R     |         |         | D     |         | RM         |
| A1110015 | CATVision-U-CPU          |       |       | U       |         |       | DT      |            |
| A1110120 | CATVision-U2-CPU         |       |       | U       | U2      |       | DT      |            |
| A1110016 | CATVision-U-CPU-RM       |       |       | U       |         |       |         | RM         |
| A1110123 | CATVision-U2-CPU-RM      |       |       | U       | U2      |       |         | RM         |
| A1110017 | CATVision-UD-CPU         |       |       | U       |         | D     | DT      |            |
| A1110121 | CATVision-U2D-CPU        |       |       | U       | U2      | D     | DT      |            |
| A1110018 | CATVision-UD-CPU-RM      |       |       | U       |         | D     |         | RM         |
| A1110124 | CATVision-U2D-CPU-RM     |       |       | U       | U2      | D     |         | RM         |
| A1110023 | CATVision-ARU-CPU        | A     | R     | U       |         |       | DT      |            |
| A1110119 | CATVision-ARU2-CPU       | A     | R     | U       | U2      |       | DT      |            |
| A1110024 | CATVision-ARU-CPU-RM     | A     | R     | U       |         |       |         | RM         |
| A1110125 | CATVision-ARU2-CPU-RM    | A     | R     | U       | U2      |       |         | RM         |
| A1110025 | CATVision-ARUD-CPU       | A     | R     | U       |         | D     | DT      |            |
| A1110122 | CATVision-ARU2D-CPU      | A     | R     | U       | U2      | D     | DT      |            |
| A1110026 | CATVision-ARUD-CPU-RM    | A     | R     | U       |         | D     |         | RM         |
| A1110126 | CATVision-ARU2D-CPU-RM   | A     | R     | U       | U2      | D     |         | RM         |
| A1110027 | Twin-CATVision-CPU       |       |       |         |         |       | DT      | RM         |
| A1110028 | Twin-CATVision-D-CPU     |       |       |         |         | D     | DT      | RM         |
| A1110029 | Twin-CATVision-R-CPU     |       | R     |         |         |       | DT      | RM         |
| A1110030 | Twin-CATVision-RD-CPU    |       | R     |         |         | D     | DT      | RM         |
| A1110031 | Twin-CATVision-AR-CPU    | A     | R     |         |         |       | DT      | RM         |
| A1110032 | Twin-CATVision-ARD-CPU   | A     | R     |         |         | D     | DT      | RM         |
| A1110033 | Twin-CATVision-U-CPU     |       |       | U       |         |       | DT      | RM         |
| A1110136 | Twin-CATVision-U2-CPU    |       |       | U       | U2      |       | DT      | RM         |
| A1110034 | Twin-CATVision-UD-CPU    |       |       | U       |         | D     | DT      | RM         |
| A1110137 | Twin-CATVision-U2D-CPU   |       |       | U       | U2      | D     | DT      | RM         |
| A1110037 | Twin-CATVision-ARU-CPU   | A     | R     | U       |         |       | DT      | RM         |
| A1110138 | Twin-CATVision-ARU2-CPU  | A     | R     | U       | U2      |       | DT      | RM         |
| A1110038 | Twin-CATVision-ARUD-CPU  | A     | R     | U       |         | D     | DT      | RM         |
| A1110139 | Twin-CATVision-ARU2D-CPU | A     | R     | U       | U2      | D     | DT      | RM         |
| A1800001 | CV-Power-CPU             |       |       |         |         |       |         |            |

## List of Item Numbers Single-Channel

| Item No. | User modules           | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
|----------|------------------------|-------|-------|---------|---------|-------|---------|------------|
| A1120003 | CATVision-CON          |       |       |         |         |       | DT      |            |
| A1120004 | CATVision-CON-RM       |       |       |         |         |       |         | RM         |
| A1120005 | CATVision-R-CON        |       | R     |         |         |       | DT      |            |
| A1120006 | CATVision-R-CON-RM     |       | R     |         |         |       |         | RM         |
| A1120007 | CATVision-AR-CON       | A     | R     |         |         |       | DT      |            |
| A1120008 | CATVision-AR-CON-RM    | A     | R     |         |         |       |         | RM         |
| A1120009 | CATVision-U-CON        |       |       | U       |         |       | DT      |            |
| A1120121 | CATVision-U2-CON       |       |       | U       | U2      |       | DT      |            |
| A1120010 | CATVision-U-CON-RM     |       |       | U       |         |       |         | RM         |
| A1120122 | CATVision-U2-CON-RM    |       |       | U       | U2      |       |         | RM         |
| A1120013 | CATVision-ARU-CON      | A     | R     | U       |         |       | DT      |            |
| A1120120 | CATVision-ARU2-CON     | A     | R     | U       | U2      |       | DT      |            |
| A1120014 | CATVision-ARU-CON-RM   | A     | R     | U       |         |       |         | RM         |
| A1120123 | CATVision-ARU2-CON-RM  | A     | R     | U       | U2      |       |         | RM         |
| A1120043 | Twin-CATVision-CON     |       |       |         |         |       | DT      | RM         |
| A1120044 | Twin-CATVision-R-CON   |       | R     |         |         |       | DT      | RM         |
| A1120045 | Twin-CATVision-AR-CON  | A     | R     |         |         |       | DT      | RM         |
| A1120046 | Twin-CATVision-U-CON   |       |       | U       |         |       | DT      | RM         |
| A1120048 | Twin-CATVision-ARU-CON | A     | R     | U       |         |       | DT      | RM         |
| A1800002 | CV-Power-CON           |       |       |         |         |       |         |            |

## List of Item Numbers Multi-Channel 2

| Art.Nr.  | Computer modules           | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
|----------|----------------------------|-------|-------|---------|---------|-------|---------|------------|
| A1210001 | CATVision-MC2-CPU          |       |       |         |         |       | DT      | RM         |
| A1210003 | CATVision-MC2-D-CPU        |       |       |         |         | D     | DT      | RM         |
| A1210005 | CATVision-MC2-R-CPU        |       | R     |         |         |       | DT      | RM         |
| A1210007 | CATVision-MC2-RD-CPU       |       | R     |         |         | D     | DT      | RM         |
| A1210009 | CATVision-MC2-AR-CPU       | A     | R     |         |         |       | DT      | RM         |
| A1210011 | CATVision-MC2-ARD-CPU      | A     | R     |         |         | D     | DT      | RM         |
| A1210013 | CATVision-MC2-U-CPU        |       |       | U       |         |       | DT      | RM         |
| A1210080 | CATVision-MC2-U2-CPU       |       |       | U       | U2      |       | DT      | RM         |
| A1210015 | CATVision-MC2-UD-CPU       |       |       | U       |         | D     | DT      | RM         |
| A1210081 | CATVision-MC2-U2D-CPU      |       |       | U       | U2      | D     | DT      | RM         |
| A1210021 | CATVision-MC2-ARU-CPU      | A     | R     | U       |         |       | DT      | RM         |
| A1210082 | CATVision-MC2-ARU2-CPU     | A     | R     | U       | U2      |       | DT      | RM         |
| A1210023 | CATVision-MC2-ARUD-CPU     | A     | R     | U       |         | D     | DT      | RM         |
| A1210083 | CATVision-MC2-ARU2D-CPU    | A     | R     | U       | U2      | D     | DT      | RM         |
| A1210025 | Twin-CATVision-MC2-CPU     |       |       |         |         |       | DT      | RM         |
| A1210026 | Twin-CATVision-MC2-D-CPU   |       |       |         |         | D     | DT      | RM         |
| A1210027 | Twin-CATVision-MC2-R-CPU   |       | R     |         |         |       | DT      | RM         |
| A1210028 | Twin-CATVision-MC2-RD-CPU  |       | R     |         |         | D     | DT      | RM         |
| A1210029 | Twin-CATVision-MC2-AR-CPU  | A     | R     |         |         |       | DT      | RM         |
| A1210030 | Twin-CATVision-MC2-ARD-CPU | A     | R     |         |         | D     | DT      | RM         |
| A1800001 | CV-Power-CPU               |       |       |         |         |       |         |            |
| Art.Nr.  | User modules               | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
| A1220001 | CATVision-MC2-CON          |       |       |         |         |       | DT      |            |
| A1220002 | CATVision-MC2-CON-RM       |       |       |         |         |       |         | RM         |
| A1220003 | CATVision-MC2-R-CON        |       | R     |         |         |       | DT      |            |
| A1220004 | CATVision-MC2-R-CON-RM     |       | R     |         |         |       |         | RM         |
| A1220005 | CATVision-MC2-AR-CON       | A     | R     |         |         |       | DT      |            |
| A1220006 | CATVision-MC2-AR-CON-RM    | A     | R     |         |         |       |         | RM         |
| A1220007 | CATVision-MC2-U-CON        |       |       | U       |         |       | DT      |            |
| A1220062 | CATVision-MC2-U2-CON       |       |       | U       | U2      |       | DT      |            |
| A1220008 | CATVision-MC2-U-CON-RM     |       |       | U       |         |       |         | RM         |
| A1220011 | CATVision-MC2-ARU-CON      | A     | R     | U       |         |       | DT      |            |
| A1220063 | CATVision-MC2-ARU2-CON     | A     | R     | U       | U2      |       | DT      |            |
| A1220012 | CATVision-MC2-ARU-CON-RM   | A     | R     | U       |         |       |         | RM         |
| A1220031 | Twin-CATVision-MC2-CON     |       |       |         |         |       | DT      | RM         |
| A1220032 | Twin-CATVision-MC2-R-CON   |       | R     |         |         |       | DT      | RM         |
| A1220033 | Twin-CATVision-MC2-AR-CON  | A     | R     |         |         |       | DT      | RM         |
| A1800002 | CV-Power-CON               |       |       |         |         |       |         |            |

## List of Item Numbers Multi-Channel 3

| Art.Nr.  | Computer modules       | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
|----------|------------------------|-------|-------|---------|---------|-------|---------|------------|
| A1310001 | CATVision-MC3-CPU      |       |       |         |         |       | DT      | RM         |
| A1310003 | CATVision-MC3-D-CPU    |       |       |         |         | D     | DT      | RM         |
| A1310005 | CATVision-MC3-R-CPU    |       | R     |         |         |       | DT      | RM         |
| A1310007 | CATVision-MC3-RD-CPU   |       | R     |         |         | D     | DT      | RM         |
| A1310009 | CATVision-MC3-AR-CPU   | A     | R     |         |         |       | DT      | RM         |
| A1310011 | CATVision-MC3-ARD-CPU  | A     | R     |         |         | D     | DT      | RM         |
| A1310013 | CATVision-MC3-U-CPU    |       |       | U       |         |       | DT      | RM         |
| A1310015 | CATVision-MC3-UD-CPU   |       |       | U       |         | D     | DT      | RM         |
| A1310021 | CATVision-MC3-ARU-CPU  | A     | R     | U       |         |       | DT      | RM         |
| A1310023 | CATVision-MC3-ARUD-CPU | A     | R     | U       |         | D     | DT      | RM         |
| A1800001 | CV-Power-CPU           |       |       |         |         |       |         |            |
| Art.Nr.  | User modules           | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Desktop    |
| A1320001 | CATVision-MC3-CON      |       |       |         |         |       | DT      | RM         |
| A1320003 | CATVision-MC3-R-CON    |       | R     |         |         |       | DT      | RM         |
| A1320005 | CATVision-MC3-AR-CON   | A     | R     |         |         |       | DT      | RM         |
| A1320007 | CATVision-MC3-U-CON    |       |       | U       |         |       | DT      | RM         |
| A1320011 | CATVision-MC3-ARU-CON  | A     | R     | U       |         |       | DT      | RM         |
| A1800002 | CV-Power-CON           |       |       |         |         |       |         |            |



## List of Item Numbers Multi-Channel 4

| Art.Nr.  | Computer modules        | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
|----------|-------------------------|-------|-------|---------|---------|-------|---------|------------|
| A1410001 | CATVision-MC4-CPU       |       |       |         |         |       | DT      | RM         |
| A1410003 | CATVision-MC4-D-CPU     |       |       |         |         | D     | DT      | RM         |
| A1410005 | CATVision-MC4-R-CPU     |       | R     |         |         |       | DT      | RM         |
| A1410007 | CATVision-MC4-RD-CPU    |       | R     |         |         | D     | DT      | RM         |
| A1410009 | CATVision-MC4-AR-CPU    | A     | R     |         |         |       | DT      | RM         |
| A1410011 | CATVision-MC4-ARD-CPU   | A     | R     |         |         | D     | DT      | RM         |
| A1410013 | CATVision-MC4-U-CPU     |       |       | U       |         |       | DT      | RM         |
| A1410029 | CATVision-MC4-U2-CPU    |       |       | U       | U2      |       | DT      | RM         |
| A1410015 | CATVision-MC4-UD-CPU    |       |       | U       |         | D     | DT      | RM         |
| A1410030 | CATVision-MC4-U2D-CPU   |       |       | U       | U2      | D     | DT      | RM         |
| A1410021 | CATVision-MC4-ARU-CPU   | A     | R     | U       |         |       | DT      | RM         |
| A1410031 | CATVision-MC4-ARU2-CPU  | A     | R     | U       | U2      |       | DT      | RM         |
| A1410023 | CATVision-MC4-ARUD-CPU  | A     | R     | U       |         | D     | DT      | RM         |
| A1410032 | CATVision-MC4-ARU2D-CPU | A     | R     | U       | U2      | D     | DT      | RM         |
| A1800001 | CV-Power-CPU            |       |       |         |         |       |         |            |
| Art.Nr.  | User modules            | Audio | RS232 | USB 1.1 | USB 2.0 | Delay | Desktop | Rack-mount |
| A1420001 | CATVision-MC4-CON       |       |       |         |         |       | DT      | RM         |
| A1420003 | CATVision-MC4-R-CON     |       | R     |         |         |       | DT      | RM         |
| A1420005 | CATVision-MC4-AR-CON    | A     | R     |         |         |       | DT      | RM         |
| A1420007 | CATVision-MC4-U-CON     |       |       | U       |         |       | DT      | RM         |
| A1420021 | CATVision-MC4-U2-CON    |       |       | U       | U2      |       | DT      | RM         |
| A1420011 | CATVision-MC4-ARU-CON   | A     | R     | U       |         |       | DT      | RM         |
| A1420022 | CATVision-MC4-ARU2-CON  | A     | R     | U       | U2      |       | DT      | RM         |
| A1800002 | CV-Power-CON            |       |       |         |         |       |         |            |

## Legend

### ABBREVIATIONS

CPU = Computer module  
PC = Computer module

CON = User module  
REM = User module

MC2 = Multichannel 2  
MC3 = Multichannel 3  
MC4 = Multichannel 4

M = Multimode  
S = Singlemode  
RM = For assembly in a 19" rack  
DT = Available as desktop variant  
A = Audio  
AR = Audio + RS232  
R = RS232  
U = transparent USB 1.1  
U2 = transparent USB 2.0  
D = Delay

### EQUIPMENT FEATURES



= keyboard/mouse



= dual-link DVI video



= single-link DVI video



= single-link DVI + VGA



= VGA video



= Audio



= RS232



= USB 1.1



= USB 2.0



= Delay



= Screen Freeze



= Power Switching



= Fire Wire



= VT100



= KVM IP access



= Network connection



= Web interface



= DevCon support



= Monitoring



= CAT cable



= Fiber optics



= Single user



= Multi user



= Separat local/remote user