product catalogue

BFR DIGITAL

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science functionality global standards creative technology

Vol. 15


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Bruno Jones
Managing Director

COMPANY PROFILE

BFR Digital specialises in the design, development and manufacture of a full range of Fibre Optic Transmission, Twisted Pair Video Transmission (UTP), Ethernet, Data Transmission, Video Amplifiers, Surge Protection and Power Supply products for IT, CCTV and Access Control System.

We know that our customers have unique business needs and that not all project requirements fit into a neat little box. We offer a full range of engineering solutions to our customers from OEM products to project specific engineering solutions.

HISTORY

BFR Digital was founded in 2001, our first product was the GUI-MUX which was a graphical user interface that operated a video multiplexer and a VCR off a Windows 98 platform. We soon found a niche business opportunity to develop and manufacture robust CCTV infrastructure equipment.

We understand that users just want equipment that works and that gimmicks lose their appeal within the first few weeks of operation. It is for this reason that innovation is key to our business. Our products constantly evolve, ensuring their reliability so they require little to no maintenance, and are easy to use. All this to better suit your unique business needs.

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DTX SERIES

The DTX Series was designed for the transmission of network data over 2km of multimode fibre optic cable and 20km of single mode fibre optic cable.

The DTX Series offers Point-to-Point Asynchronous Transparent Transfer of data. A DTX Series fibre optic link will behave as an extension to the CAT5 or CAT6 cable and requires no configuration.

Features:
- 10/100Base-T
- Gigabit
- Single Fibre
- Dual Fibre
- Auto negotiation
- Auto MDI/MDI-X negotiation
- Point-to-point transparent transfer
- Power Over Ethernet (PoE)

DTX-100-SSM-2
(Single Mode; 20km)
DTX-100-SMM-2
(Multimode; 2km)

10/100Base-T Ethernet media converter; auto-negotiation; 100Base-FX full-duplex; stand-alone; Dual Fibre.

DTX-100-RSM-2
(Single Mode; 20km)
DTX-100-RMM-2
(Multimode; 2km)

10/100Base-T Ethernet media converter; auto-negotiation; 100Base-FX full-duplex;Cage Card; Dual Fibre.

DTX-1000-SSM-2
(Single Mode; 20km)
DTX-1000-SMM-2
(Multimode; 500m)

1000Base-T Ethernet media converter; auto-negotiation; 1000Base-LX; full-duplex; stand-alone; Dual Fibre.

DTX-1000-RSM-2
(Single Mode; 20km)
DTX-1000-RMM-2
(Multimode; 500m)

1000Base-T Ethernet media converter; auto-negotiation; 1000Base-LX; full-duplex; stand-alone; Dual Fibre.

DTX-100-SSM-A
DTX-100-SSM-B
(Single Mode; 20km)
DTX-100-SMM-A
DTX-100-SMM-B
(Multimode; 2Km)

10/100Base-T Ethernet media converter; auto-negotiation; 100Base-FX full-duplex; stand-alone; Single Fibre.

DTX-100-RSM-A
DTX-100-RSM-B
(Single Mode; 20km)
DTX-100-RMM-A
DTX-100-RMM-B
(Multimode; 2Km)

10/100Base-T Ethernet media converter; auto-negotiation; 100Base-FX full-duplex; Cage Card; Single Fibre.

DTX-RACK

16 slot 19” rack mount card cage; including PSU. Cage cards are sold separately.

DTX-223-SSM-2
(Single Mode; 20km)

100Base-T Dual Fibre Port Industrial Ethernet Switch; 3 RJ45 ports; auto-negotiation; 100Base-LX; full-duplex; stand-alone; 20km Single Mode; Dual Fibre.

DTX-223-SMM-2
(Multimode; 2km)

100Base-T Dual Fibre Port Industrial Ethernet Switch; 3 RJ45 ports; auto-negotiation; 100Base-LX; full-duplex; stand-alone; 2km Multimode; Dual Fibre.

DTX-04-POE

Unmanaged PoE Ethernet switch; 4 port PoE 10/100Mbps; 30W per port; one 100M SFP uplink port; one 100M uplink port.

DTX-08-POE

Unmanaged PoE Ethernet switch; 8 port PoE 10/100Mbps; 30W per port; one Gigabit SFP uplink port; one Gigabit uplink port.

DTX-24-POE

Unmanaged PoE Ethernet switch; 24 port PoE 10/100Mbps; 400W Maximum PoE power; 25W port maximum; two Gigabit SFP uplink port; two Gigabit uplink port.

POE-SOL-48S

Solar powered PoE injector;
30W 48V PoE output;
secondary 12Vdc 1.5A output;
battery charger with 11V cut-off;
solar panel and battery not included.

POE-SOL-48KIT

Solar powered PoE injector;
30W 48V PoE output;
secondary 12Vdc 1.5A output;
battery charger with 11V cut-off;
including: 140W Solar panel,
solar panel mounting kit for a pole,
60Ah 12V battery, IP65 enclosure,
POE-SOL-48S and battery.

FIBRE PRO

Fibre PRO was designed for the digital transmission of:
- Video
- Bi-directional Audio
- Bi-directional Data
- Bi-directional Contact Closures

Over 2.5km of multimode fibre optic cable and 30km of single mode fibre optic cable.

The video is encoded using 8-bit digital encoding but is not compressed as bandwidth need not be a consideration. The Fibre PRO range features Wavelength Division Multiplexing (WDM) and thus each product only has one fibre optic connector regardless of the number of functions available on the product.

The data transmitted over Fibre Pro is full duplex, bi-directional data making it suitable for both Pan/Tilt/Zoom cameras and access control applications.

VTX-040-SMM
(Stand-alone, Multimode 2km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter, 2km multimode.

VRX-040-SMM
(Stand-alone, Multimode 2km)
VRX-040-RMM
(Cage card, Multimode 2km)

Fibre optic 8-bit uncompressed digitally encoded video receiver, 2km multimode.

VTX-040-SSM
(Stand-alone, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter, 30km single mode.

VRX-040-SSM
(Stand-alone, Single Mode 30km)
VRX-040-RSM
(Cage card, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video receiver, 30km single mode.

VTXD-040-SMM
(Stand-alone, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, 2,5km multimode**.**

VRXD-040-SMM
(Stand-alone, Multimode 2,5km)
VRXD-040-RMM
(Cage card, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, 2,5km multimode.

VTXD-045-SMM
(Stand-alone, Multimode 5km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, 5km multimode.

VRXD-045-SMM
(Stand-alone, Multimode 5km)
VRXD-045-RMM
(Cage card, Multimode 5km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, 5km multimode.

VTXD-040-SSM
(Stand-alone, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, 30km single mode.

VRXD-040-SSM
(Stand-alone, Single Mode 30km)
VRXD-040-RSM
(Cage card, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, 30km single mode.

VTXDA-145-SMM
(Stand-alone, Multimode 5km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485, bi-directional audio channel, 5km multimode.

VRXDA-145-SMM
(Stand-alone, Multimode 5km)
VRXDA-145-RMM
(Cage Card, Multimode 5km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485, bi-directional audio channel, 5km multimode.

VTXDC-040-SMM
(Stand-alone, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, bi-directional contact closure 2.5km multimode.

VRXDC-040-SMM
(Stand-alone, Multimode 2,5km)
VRXDC-040-RMM
(Cage Card, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, bi-directional contact closure 2.5km multimode.

VTXDC-040-SSM
(Stand-alone, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, bi-directional contact closure 30km single mode.

VRXDC-040-SSM
(Stand-alone, Single Mode 30km)
VRXDC-040-RSM
(Cage Card, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, bi-directional contact closure 30km single mode.

VTXDA-040-SMM
(Stand-alone, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 2.5km multimode.

VRXDA-040-SMM
(Stand-alone, Multimode 2,5km)
VRXDA-040-RMM
(Cage Card, Multimode 2,5km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 2.5km multimode.

VTXDA-040-SSM
(Stand-alone, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 30km single mode.

VRXDA-040-SSM
(Stand-alone, Single Mode 30km)
VRXDA-040-RSM
(Cage Card, Single Mode 30km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 30km single mode.

VTXDCAE-040-SSM
(Stand-alone, Single Mode 20km)
VTXDCAE-040-SMM
(Stand-alone, Multimode 2km)

Fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 10/100Base-T Ethernet port.

VRXDCAE-040-SSM
(Stand-alone, Single Mode 20km)
VRXDCAE-040-SMM
(Stand-alone, Multimode 2km)

Fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, bi-directional contact closure, bi-directional audio channel, 10/100Base-T Ethernet port.

VQTXD-040-SMM
(Stand-alone, Multimode 2km)
VQTXD-040-RMM
(Cage Card, Multimode 2km)

4 channel fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, 2km multimode.

VQRXD-040-SMM
(Stand-alone, Multimode 2km)
VQRXD-040-RMM
(Cage Card, Multimode 2km)

4 channel fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, 2km multimode.

VQTXD-040-SSM
(Stand-alone, Single Mode 30km)
VQTXD-040-RSM
(Cage Card, Single Mode 30km)

4 channel fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422, 30km single mode.

VQRXD-040-SSM
(Stand-alone, Single Mode 30km)
VQRXD-040-RSM
(Cage Card, Single Mode 30km)

4 channel fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422, 30km single mode.

VOTXD-040-SSM
(Stand-alone, Single Mode 30km)
VOTXD-040-SMM
(Stand-alone, Multimode 1,5km)

8 channel fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422.

VORXD-040-SSM
(Stand-alone, Single Mode 30km)
VORXD-040-SMM
(Stand-alone, Multimode 1,5km)

8 channel fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422.

VHTXD-040-SSM
(Stand-alone, Single Mode 20km)
VHTXD-040-SMM
(Stand-alone, Multimode 500m)

16 channel fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422.

VHRXD-040-SSM
(Stand-alone, Single Mode 20km)
VHRXD-040-SMM
(Stand-alone, Multimode 500m)

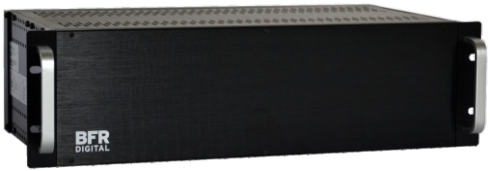
16 channel fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422.

VPTXD-040-SSM
(Stand-alone, Single Mode 10km)

32 channel fibre optic 8-bit uncompressed digitally encoded video transmitter with bi-directional data channel, RS485/422.

VPRXD-040-SSM
(Stand-alone, Single Mode 10km)

32 channel fibre optic 8-bit uncompressed digitally encoded video receiver with bi-directional data channel, RS485/422.



VRX-RACK-V2
(For Fibre Pro cards)

18 slot, 19 inch, 3U, Fibre Pro card cage with power supply. Cage cards are sold separately.

FIELD-ENC

IP55 Field Enclosure Featuring a splice cassette, a multiple output power supply (5Vdc at 500mA, 12Vdc at 1A and 24Vac at 2A) and a DTX Series adaptor. Transmitters and receivers sold separately.

tip

Perform an OTDR test on each fibre as part of the system commissioning process

OTDR tests are used to locate breaks or similar problems in cable runs. It's good practice to perform an OTDR test as a snapshot of the condition of the fibres before handing over the installation to the customer. This snapshot, which is a paper copy of the ODTR trace, gives you a permanent record of the state of that fibre at the time of handover. This can help installers when fibres have been damaged or altered after installation, proving where responsibility for the damage lies. In fact, some customers will demand OTDR testing as a condition for system handover.

FIBRE LITE

Fibre Lite was designed for the analogue transmission of:
- Video
- Audio
- Data
- Contact Closures

Over 2.5km of multimode fibre optic cable. All transmission is unidirectional and the data transmission is designed for Pan/Tilt/Zoom camera control.

When overall system implementation costs need to be reduced we recommend the FIELD-LITE-4 enclosure. This enclosure features 4 video transmitters and 1 data receiver. The data is distributed out of 4 individual outputs, which allows for the operation of 4 Pan/Tilt/Zoom cameras through 1 data channel. This effectively reduces the equipment count by 3 data transmitters and 3 data receivers. By doing this the fibre optic cable count is also reduced by 3 fibres.

LVTX-010-SMM

Single channel video transmitter, 850NM, Multimode, 2.5km, Stand-alone.
HD-CVI, HD-TVI and AHD compatible.

LVTX-010-RMM

Single channel video transmitter, 850NM, Multimode, 2.5km, Cage card.
HD-CVI, HD-TVI and AHD compatible.

LVTX2-010-RMM

Two channel video transmitter, 850NM, Multimode, 2.5km, Cage card, Dual fibre.
HD-CVI, HD-TVI and AHD compatible..

LVRX-010-SMM

Single channel video receiver, 850NM, Multimode, 2.5km, Stand-alone.
HD-CVI, HD-TVI and AHD compatible.

LVRX-010-RMM

Single channel video receiver, 850NM. Featuring Digitally Controlled AGC, Cage card.

LVRX2-010-RMM

Two channel video receiver, 850NM. Featuring AGC, Cage card.

LVTXD-010-SMM

Single channel video transmitter and data receiver, 850NM, Multimode, 2.5km, Dual fibre, Stand-alone.

LVRXD-010-SMM

Single channel video receiver and data transmitter, 850NM, Multimode, 2.5km, Dual fibre, Stand-alone, Featuring Digitally Controlled AGC.

LVTXD-010-RMM

Single channel video transmitter and data receiver, 850NM, Multimode, 2.5km, Dual fibre, Cage card.

LVRXD-010-RMM

Single channel video receiver and data transmitter, 850NM, Multimode, 2.5km, Dual fibre, Cage card, Featuring AGC.

LDTX-010-RMM

Single channel data transmitter, 850NM, Multimode, 2.5km, Cage card.

LDRX-010-RMM

Single channel data receiver, 850NM, Multimode, 2.5km, Cage card.

LCTX5-010-SMM

Five channel contact closure transmitter, 850NM, Multimode, 2.5km, Stand-alone.

LCTX5-010-RMM

Five channel contact closure transmitter, 850NM, Multimode, 2.5km, Cage card.

LCRX5-010-RMM

Five channel contact closure receiver, 850NM, Multimode, 2.5km, Cage card.

LARX-010-SMM

Single channel audio receiver, Audio Line Output, 850NM, Multimode, 2.5km, Stand-alone.

LATX2-010-RMM

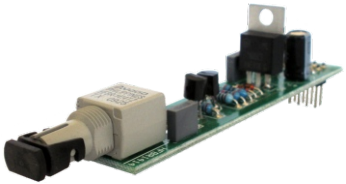
Two channel audio transmitter, Audio Line Input, 850NM, Multimode, 2.5km, Cage card, Dual fibre.

LITE-RACK

16 slot 19” rack mount card cage; including PSU. Cage cards are sold separately.

FIELD-LITE-4

Fibre Lite field enclosure, including 4 video transmitters, 1 data receiver, 4-way data distributor, power supply, splice cassette, 850NM, 2.5km, Multimode.
HD-CVI, HD-TVI and AHD compatible.



LVTX -010-MMM

Single channel video transmitter, 850NM, Multimode, 2.5km, Module for FIELD-LITE-4.

LDRX-010-MMM

Single channel data receiver, 850NM, Multimode, 2.5km, Module for FIELD-LITE-4.

FIELD-LITE-BAT

Fibre Lite field enclosure, including a battery backed power supply with a 12Vdc 2Amp output, splice cassette, featuring 2 slots that accommodates any 2 Fibre Lite/Fibre Lite Plus or DTX cage cards.

tip

Use the correct cable for your application

Many installations are being done with ruggedized fibre optic cable for applications internal to a building. Ruggedized fibre optic cable is intended for patch cords. We recommend heavy duct fibre for applications both internal and external to a building.

Heavy duct fibre optic cable is a hardy water tight cable that can withstand the stresses of the installation process. Use the correct cable for hassle free installations; when installing cable overhead use aerial span cable; when burying cable use steel taped armoured cable.

FIBRE LITE PLUS

Fibre Lite Plus was designed for the analogue transmission of:
- Video
- Audio
- Data
- Contact Closures

Over 6km of multimode fibre optic cable. All transmission is unidirectional and the data transmission is designed for Pan/Tilt/Zoom camera control.

When overall system implementation costs need to be reduced we recommend the FIELD-LITE-4 enclosure. This enclosure features 4 video transmitters and 1 data receiver. The data is distributed out of 4 individual outputs, which allows for the operation of 4 Pan/Tilt/Zoom cameras through 1 data channel. This effectively reduces the equipment count by 3 data transmitters and 3 data receivers. By doing this the fibre optic cable count is also reduced by 3 fibres.

PVTX-010-SMM

Single channel video transmitter, 1300NM, Multimode, 6km, Stand-alone.
HD-CVI, HD-TVI and AHD compatible.

PVTX-010-RMM

Single channel video transmitter, 1300NM, Multimode, 6km, Cage card.
HD-CVI, HD-TVI and AHD compatible.

PVTX2-010-RMM

Two channel video transmitter, 1300NM, Multimode, 6km, Cage card, Dual fibre.
HD-CVI, HD-TVI and AHD compatible.

PVRX-010-SMM

Single channel video receiver, 1300NM, Multimode, 6km, Stand-alone.
HD-CVI, HD-TVI and AHD compatible.

PVRX-010-RMM

Single channel video receiver, 1300NM, Multimode, 6km, Cage card, Featuring Digitally controlled AGC.

PVRX2-010-RMM

Two channel video receiver, 1300NM, Multimode, 6km, Cage card, Dual fibre, Featuring AGC.

PVTXD-010-SMM

Single channel video transmitter and data receiver, 1300NM, Multimode, 6km, Dual fibre, Stand-alone.

PVRXD-010-SMM

Single channel video receiver and data transmitter, 1300NM, Multimode, 6km, Dual fibre, Stand-alone, Featuring Digitally Controlled AGC.

PVTXD-010-RMM

Single channel video transmitter and data receiver, 1300NM, Multimode, 6km, Dual fibre, Cage card.

PVRXD-010-RMM

Single channel video receiver and data transmitter, 1300NM, Multimode, 6km, Dual fibre, Cage card, Featuring AGC.

PDTX-010-RMM

Single channel data transmitter, 1300NM, Multimode, 6km, Cage card.

PDRX-010-RMM

Single channel data receiver, 1300NM, Multimode, 6km, Cage card.

PCTX5-010-SMM

Five channel contact closure transmitter, 1300NM, Multimode, 6km, Stand-alone.

PCTX5-010-RMM

Five channel contact closure transmitter, 1300NM, Multimode, 6km, Cage card.

PCRX5-010-RMM

Five channel contact closure receiver, 1300NM,Multimode, 6km, Cage card.

PARX-010-SMM

Single channel audio receiver, Audio Line Output, 1300NM, Multimode, 6km, Stand-alone.

PATX2-010-RMM

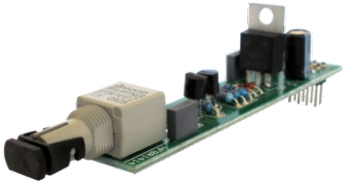
Two channel audio transmitter, Audio Line Input, 1300NM, Multimode, 6km, Cage card, Dual fibre.

LITE-RACK

16 slot 19” rack mount card cage; including PSU. Cage Cards are sold separately.

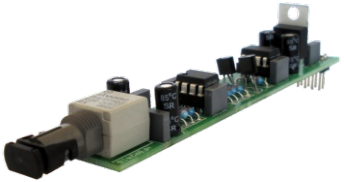
FIELD-PLUS-4

Fibre Lite Plus field enclosure, including 4 video transmitters, 1 data receiver, 4-way data distributor, power supply, splice cassette, 1300NM, 6km, Multimode. HD-CVI, HD-TVI and AHD compatible.



PVTX -010-MMM

Single channel video transmitter, 1300NM, Multimode, 6km, Module for FIELD-LITE-4.



PDRX-010-MMM

Single channel data receiver, 1300NM, Multimode, 6km, Module for FIELD-LITE-4.

FIELD-LITE-BAT

Fibre Lite field enclosure, including a battery backed power supply with a 12Vdc 2Amp output, splice cassette, featuring 2 slots that accommodates any 2 Fibre Lite/Fibre Lite Plus or DTX cage cards.

tip

Bend radius should be 500mm (Multimode) to 700mm (Single Mode)

Studies have shown that larger light wavelengths are more sensitive to the bending radius of the fibre optic cable. Put simply, the losses of a 1550nm wavelength transmitted over a single mode fibre optic cable will be greater as the bend radius of the fibre optic cable is reduced. The same principle applies to 850nm wavelengths over multimode fibre optic cable. The general rule for a minimum bend radius on fibre optic cable is 10 times overall diameter for multimode cable and 20 times overall diameter for single mode cable. There are other factors to consider such as; the loading effects on the fibres in the tray or conduit, temperature variations, ageing effects and PMD variations. It is because of all these factors that we recommend a bend radius of 500mm for Multimode cables and to 700mm for Single Mode cables.

VIDEO CAT

Our Video CAT range of products are designed to transmit differential video over CAT5e cable. The passive products transmit video up to 300m of cable while the active products offer a maximum cable length of 1000m. Only 1 pair of the CAT5e cable is required per video feed and up to 4 camera feeds can be transmitted over a single CAT5e cable.

The Power CAT products comprise of 2 components, the VC-016PR rack and the VC-01PM module. The VC-016PR rack is a 10Amp power supply that supplies raw power to the camera and receives video from the camera. The VC-01PM conditions the raw power and supplies 12Vdc to the camera whilst also transmitting the video. The video is transmitted as differential video over a maximum cable length of 300m of CAT5e cable. We specify 1 CAT5e cable per camera of which 1 pair is used for video transmission and the remaining 3 pairs used for the transmission of the raw power for the camera.

VC-01

Single channel Video CAT differential (UTP) video transceiver; direct camera coupling; 300m passive; 1000m with VCA-01R or VCA-01S active receivers.
HD-CVI, HD-TVI and AHD compatible.

VC-04

Four channel Video CAT differential (UTP) video transceiver; 300m passive; 1000m with VCA-01R or VCA-01S active receivers
HD-CVI, HD-TVI and AHD compatible.

VC-016R

Sixteen channel Video CAT differential (UTP) video transceiver; 300m passive; 1000m with VCA-01R or VCA-01S active receivers. HD-CVI, HD-TVI and AHD compatible.

VC-016RJ

16 channel Video CAT differential (UTP) video transceiver; 300m passive; 1000m with VCA-01R or VCA-01S active receivers; with Rj45 connectors
HD-CVI, HD-TVI and AHD compatible.

VC-016RJ-AGC

16 channel Video CAT differential (UTP) video receiver with AGC compensation and independent video indicators; 300m

VCA-01S

Single channel Video CAT differential (UTP) video receiver; 1000m active; Stand-Alone.
HD-CVI, HD-TVI and AHD compatible.

VC-01R

Single channel Video CAT differential (UTP) video transceiver; 300m passive; cage card for VCA-016R.

VCA-01R

Single channel Video CAT differential (UTP) video receiver; 1000m active; cage card for VCA-016R.

VCA-016R

Sixteen slot Video CAT card cage for VC-01R and VCA-01R cage cards; including power supply. Cage cards are sold separately.

GND-ISO

Single channel coaxial video ground loop isolator.

VC-01PM

Single channel Video CAT differential (UTP) transmitter; with built-in DC-DC converter; 12Vdc output; 1 per camera; used with VC08PR or VC-016PR; 300m passive. HD-CVI, HD-TVI and AHD compatible.

VC-08PR
(Eight Channel; 6Amp)
VC-016PR
(Sixteen Channel; 10Amp)

16 channel Video CAT differential (UTP) receiver; with 30Vdc output; 500mA per channel; one VC-01PM module required per channel - 300m passive. HD-CVI, HD-TVI and AHD compatible.

VIDEO CAT PRO

Longer cable distance, easier installation, perfect picture.

We designed Video CAT Pro to facilitate the transmission of video over a copper cable length of 1800m.

Differential video signals sent over long distances of twisted pair wire exhibit large high frequency attenuation, resulting in loss of high frequency detail/blurring. The exact loss characteristic is a complex function of wire gauge, length, composition, and coupling to adjacent conductors.

The video signal can be restored by applying a filter with the exact inverse transfer function to the far end signal. Video CAT Pro is designed to compensate for the losses due to long cables, and incorporates the functionality and flexibility to match a wide variety of cable types and loss characteristics.

Video CAT Pro has been designed to be fully automated with the only manual function being the selector between CAT5 and RG59.

The VCP-ISL-01R offers 99% video reproduction at 1000m (same as a camera connected to a monitor on a 1m lead) and 75% video reproduction at 1800m (same as a camera connected to a monitor on 250m of RG59).

VCP-ISL-01R

Single channel receiver, automatic video equalizer, fully-adaptive to 1600m CAT5 or 1800m RG59

VCP-ISL-02R

Single channel receiver, automatic video equalizer, fully-adaptive to 1200m CAT5 or 1300m RG59

VCP-ISL-03R

Single channel receiver, automatic video equalizer, fully-adaptive to 900m CAT5 or 1000m RG59

VCP-ISL-04R

Single channel receiver, automatic video equalizer, fully-adaptive to 600m CAT5 or 700m RG59

VCP-RACK

16 slot 19” rack mount card cage, including PSU. Cage Cards sold separately.

DIN-C

DIN rail mount enclosure for Video CAT Pro Cage Cards

Midspan PoE Injectors

BFR Digital is proud to introduce high-end, high-power solutions for PoE (Power over Ethernet) IP cameras and other devices. All our products feature a self-contained power supply and surge protection. Our production range will cater for the most demanding industrial IP CCTV applications.

As we all know, PoE offers the advantage of power and data for a network device on one cable.

Our products are 10/100 IEEE 802.3af complaint PoE Midspan PSE featuring:

- Wide input supply voltage range
- Self contained 48v power supply
- Built-in surge protection
- High power output
- Intelligent PoE status indication and power management
- 1.5KV zone 2 protection level

The PoE-PSE devices are IEEE 802.3af complaint and have a uniquely intelligent indicator for:

- Non-Powered Device connected
- Port On
- Low Signature Resistance
- High Signature Resistance
- Port Overload
- PSE Power Supply Overload

POE-ESA-01

Single port 10/100Mbps PoE ethernet arrester, for use with POE-PSE-02S/04S/10R

POE-PSE-02S

Two port 10/100Mbps Midspan PoE PSE (Power Sourcing Equipment) and surge arrester, max of 12.5W per port

POE-PSE-04S

Four port 10/100Mbps Midspan PoE PSE (Power Sourcing Equipment) and surge arrester, max of 15W per port

POE-PSE-10R

Ten port 10/100Mbps Midspan PoE PSE (Power Sourcing Equipment) and surge arrester, max of 7.5W per port

tip

100m cable length

When using a Midspan PoE PSE the length distance between the enternet switch and the IP device (i.e. camera) can not be increased. The maximum cable length between the camera and the ethernet switch remains 100m.

It is also advisable to protect both ends of the line, i.e. have a PoE-ESA at the device and a PoE-PSE at the switch. The PoE-PSE are not just Power Sourcing Equipment but also feature surge protection.

DATA

Our data products are designed for Pan/Tilt/Zoom camera control. With the exception of the CD232-422 the data products are unidirectional.

The CD422TX is a data distributor and used for wiring Pan/Tilt/Zoom cameras in a star configuration. The CD422TX is available with 8 or 16 output ports. All ports feature individual surge suppression.

When installing CCTV Pan/Tilt/Zoom cameras it's easier to run the data cable with the video cable than to daisy-chain the data cable from one camera to the next. The CD422TX is designed for this exact system topology and eliminates data termination problems that arise from this type of wiring configuration.

CD232-422

Single port RS232 to RS422 converter, DB9 connector for RS232, screw terminals for RS422, port powered.

CD422TX-08

8 port unidirectional RS422 data distribution unit

CD422TX-16

16 port unidirectional RS422 data distribution unit

VIDEO AMPLIFIERS

All our video amplifiers are for composite video terminated at 75ohm.

The TC-401 is a video launch amplifier and should ideally be installed as close to the video source as possible.

The VDA16X2 is a 16 input by 32 output video distribution amplifier. This product has been very effectively used in applications where a video surveillance control-room needs to be relocated. The DVR is removed and the camera video feeds terminated into the VDA16X2, the video is reconditioned by the VDA16X2 and connected in a Video CAT transceiver, a Fibre Lite, Fibre Lite Plus or Fibre Pro transmitter rack for transmission of the video feeds from 300m to 30km of cable.

TC-401

Single channel composite video launch amplifier; 13dB gain.
HD-CVI, HD-TVI and AHD compatible.

TC-402

1 in 4 out composite video distribution amplifier.
HD-CVI, HD-TVI and AHD compatible.

VDA16X2

16 channel composite video distribution amplifier, 2 outputs per channel.
HD-CVI, HD-TVI and AHD compatible.

I-WIE

The I-WIE range offers optical isolation between an access control wiegand controller and an access control wiegand reader. The products in the range offer isolation from just the D0 and D1 communication line to the isolation of D0, D1, LED1, LED2 and the 12 Vdc power supply.

Ports D0 and D1, which are the serial data and clock lines, are effective up to a data rate of 10Mbps. LED1 and LED2 offers logic state optical isolation.

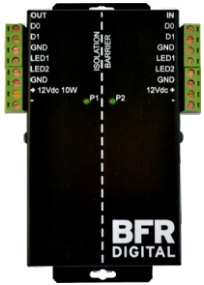
The I-WIE5 features a true 10 watt DC to DC converter with 1.5KV isolation.

I-WIE2

Wiegand isolator for D0 and D1

I-WIE4

Wiegand isolator for D0, D1, LED1 and LED2



I-WIE5

Wiegand isolator for D0, D1, LED1, LED2 and 12Vdc at 10Watt

IVA SERIES
OPTICAL VIDEO ISOLATOR

The IVA Series was designed as the ultimate protection against ground loop faults and lightning for the video inputs of a Digital Video Recorder (DVR).
The IVA-01R optically isolates the field cable from the DVR offering:
- Isolation up to 3750Vrms for 1 minute
- Elimination of video ground loop faults
- Elimination of ground loop video tearing and hum-bars
- Effective transient protection up to 8000V peak
- Elimination of the requirement to have the camera and DVR on the same earthing point

IVA-01R
Single channel Optical Video Isolator cage card for IVA-016R.

IVA-016R
Sixteen slot card cage for IVA-01R cage cards. IVA-01R cage cards sold separately.

SURGE PROTECTION

Keeping your CCTV security operational is critical to an effective surveillance system. If your equipment is not operational, the safety and security of your staff and your property can be put in jeopardy. One of the biggest threats to the effective operation of your CCTV equipment are lightning strikes and electrical surges. If an electrical surge occurs, your equipment can be destroyed.

All our surge protection products are class 2 and 3 products. Our products are designed for IT and CCTV systems.

The VCSA-01 and VCSA-016R are deferential video surge arresters specifically designed for our Video CAT range of products.

ESA-01

Single port 10/100BaseT ethernet surge arrester, for **IP** systems.

ESA-04

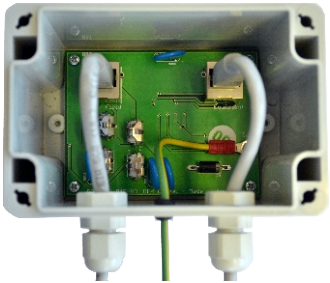
Four port 10/100BaseT ethernet surge arrester, for **IP** systems.

ESA-20R

Twenty port 10/100BaseT ethernet surge arrester, for **IP** systems.

GSA-01

Single port Gigabit (10/100/1000Base-T) ethernet surge arrester, for **IP** systems.

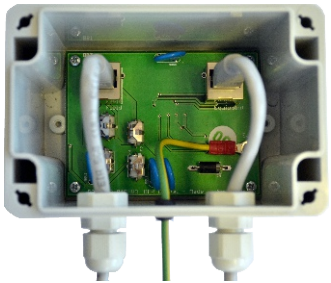


POE-GSA-01E

Outdoor IP65, single port PoE Gigabit (10/100/1000Base-T) ethernet surge arrester, for **PoE** systems.

POE-GSA-01

Single port PoE Gigabit (10/100/1000Base-T) ethernet surge arrester, for **PoE** systems.



POE-ESA-01E

Outdoor IP65, single port PoE 10/100Base-T ethernet surge arrester, for **PoE** systems.

POE-ESA-01

Single port PoE 10/100Base-T ethernet surge arrester, for **PoE** systems.

POE-ESA-04

Four port PoE 10/100Base-T ethernet surge arrester, for **PoE** systems.

POE-ESA-20R

Twenty port PoE 10/100Base-T ethernet surge arrester, for **PoE** systems.

HDSA-01

Single channel coaxial surge arrester, for **HD-CVI, HD-CVI, HD-SDI and AHD** systems.

HDPA-012

Single channel coaxial and 12volt DC surge arrester, for **HD-CVI, HD-CVI, HD-SDI and AHD** systems.

HDPA-024

Single channel coaxial and 24volt AC surge arrester, for **HD-CVI, HD-CVI, HD-SDI and AHD** systems.

HDPA-D-024

Single channel coaxial, data and 24volt AC surge arrester, for **HD-CVI, HD-CVI, HD-SDI and AHD** systems.

HDSA-016R

16 channel coaxial surge arrester, for **HD-CVI, HD-CVI, HD-SDI and AHD** systems.

VSA-01

Single channel coaxial, video surge arrester.

VPA-012

Single channel coaxial video and 12volt DC surge arrester.

VPA-024

Single channel coaxial video and 24volt AC surge arrester.

VPA-D-012

Single channel coaxial video, data and 12volt DC surge arrester

VPA-D-024

Single channel coaxial video, data and 24volt AC surge arrester

VSA-016R

16 channel coaxial, video surge arrester.

VCSA-01

Single channel Video CAT (UTP) differential video surge arrester.

VCSA-016R

16 channel Video CAT (UTP) differential video surge arrester.

DSA-01

Two wire RS-485/422 surge arrester

DSA-01H

High performance two wire surge arrester, up to 5Vdc operating voltage, for RS-232, RS-485/422, alarm inputs, and alarm panel communications bus.

BFR-SA-220VAC

Single phase 220V AC Mains surge arrester, featuring:

- Surge and transient protection
- Mains over-voltage protection
- Electromagnetic Interference (EMI) suppression
- Interference suppression
- Frequency attenuation
- Protection from surges caused by lightning and power outages
- 60KA peak current suppression per mode (L-N, L-E and N-E)
- Designed to protect sensitive medical, IT and security equipment

POWER SUPPLIES

Our power supplies are robust and designed for security applications. All our power supplies feature Metal Oxide Varistors, these devices offer over voltage protection on the mains input. All inputs and outputs are protected with either fast blow fuses or resettable fuses.

Our battery backed power supplies feature an automatic 10.9 volt cut-off on the battery to protect the battery from a deep discharge cycle.

PSU-250VA-12VDC

12Vdc 10Amp fused power supply with mains input over voltage protection, 16 individually fused 1Amp outputs with surge protection and 16 channels of video surge protection.

PSU-250VA

24Vac 10Amp fused power supply with mains input over voltage protection, 16 individually fused outputs with surge protection and 16 channels of video surge protection.

PSU-317T

12Vdc 1Amp regulated power supply with mains input over voltage protection, resettable fused output and short circuit protection.

PSU-12-3A

12Vdc 3Amp regulated battery backed power supply with mains input over voltage protection and resettable fused output.

PSU-12-6A

12Vdc 6Amp unregulated battery backed power supply with mains input over voltage protection and 6 resettable fused outputs.

PSU-24VAC-1A

24Vac 1Amp fused power supply with mains input over voltage protection and fused output.

PSU-24VAC-2A

24Vac 2Amp fused power supply with mains input over voltage protection and fused output.

PSU-24VAC-6A

24Vac 6Amp fused power supply with mains input over voltage protection and fused output.

PSU-24VAC-6A-MULTI

24Vac 6Amp fused power supply with mains input over voltage protection and 8 individually fused outputs.

NOTES


Fibre Lite
Video TX
Plus
Fibre Lite
Video Out
Gain
Plus
Plus
Pwr
Video
Manual
Auto
Video RX
Data TX
Plus
Pwr
Video
Data RX
Video TX

NOTES


Fibre Lite
Plus
Video TX
Fibre Lite
Plus
Video Out
Gain
Plus
Pwr
Video
Manual
Auto
Video RX
Data TX
Plus
Pwr
Video
Data RX
Video TX
Plus

WARRANTY POLICY

- 5 year manufacturer's warranty on Fibre Optic products
- 3 year manufacturer's warranty on Video CAT products
- 1 year manufacturer's warranty on Copper products

Terms and conditions apply. For full warranty details please visit www.bfrdigital.co.za.

REPAIR POLICY

All products under warranty are repaired or replaced in line with our warranty policy. All products that are out of warranty are repaired at no charge to our customers provided that:

- Our customers are responsible for all transportation costs
- That the products are repairable and have not been subjected to abuse or excessive electrical surge damage.

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