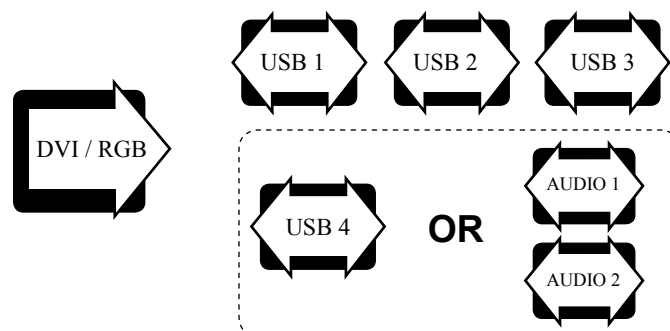
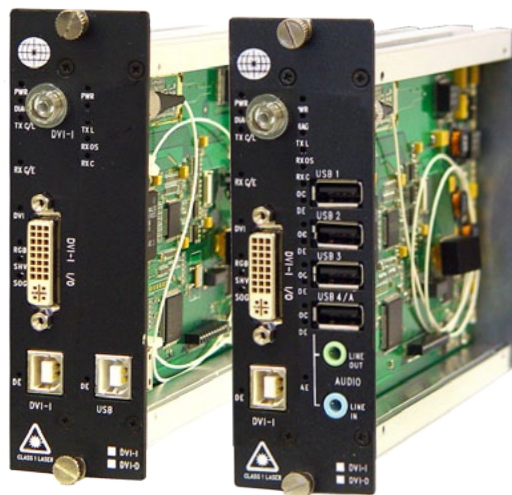


Digitally-Encoded DVI / RGB Video, USB, Keyboard & Mouse Transmission System over One Single-mode Fiber

FEATURES:

- Digital Transmission of DVI, RGBHV, RGsB
- USB 2.0, Stereo Audio, Keyboard and Mouse over One Single-mode Fiber
- USB 2.0 Extender with 4-port Hub or 2 Channel 16-bit Audio and 3 USB Ports
- Supports VGA, SVGA, SGA, SXGA & USGA Formats (640x480 to 1600x1200x60Hz)
- HDTV Resolutions of 480p, 720p, 1080i & 1080p
- Video Input/Output Format Conversion Between RGBHV, DVI & RGsB
- Uses All-Digital Processing & Transmission for Crystal-Clear Signals and No Color Skewing
- No Video Compression – Real-Time Video Transmission for Exceptional Quality & Resolution
- Requires No Adjustments, Equalization or De-Skewing
- Standard DVI-I Video Connector with Adapter Included for Standard VGA Interface
- USB 2.0 4-port Hub for Keyboard, Mouse, External HDD and Other USB Peripheral Devices
- Wide Optical Dynamic Range: Eliminates Need for Optical Attenuators
- Single-mode Laser Based Systems

MARKETS:

- ✓ Courtrooms
- ✓ Medical & MRI displays
- ✓ Residential
- ✓ Secure computer installations
- ✓ Stock exchanges
- ✓ Video walls
- ✓ CAD / CAM

DESCRIPTION:

Meridian's FT/FR-1RG1Q2A/1Q2A-x and FT/FR-1DV1Q2A/1Q2A-x products are part of Meridian's DigiCool product family and are the state-of-the-art, cost-effective, high performance Video/USB/Audio/Keyboard/Mouse transmission systems that transports the following signals: 1-ch fully-compliant DVI, RGBHV, or RGsB signal, plus keyboard, mouse and 2-ch audio (input/output) over one single-mode fiber using a standard USB 2.0 transport medium.

At the transmit side, the USB interface connects directly to a standard USB 2.0 port on your computer and provides a 4-port USB 2.0 hub at the receive side. Four USB ports can be used to connect your computer keyboard, mouse or other USB 2.0 device such as a flash drive or external HDD. The fourth of the USB ports can also be switched to transmit the computer audio output and line input channels and provides them on standard 3.5mm stereo phone jacks on the receive unit. The supplied video adapter allow easy interface to standard VGA connectors on computers and monitors.

The FT/FR-1RG1Q2A/1Q2A-x provides real-time, digitized transmission of the RGB and H&V sync signals. Because it transmits signals in real-time, no video information is lost and is a perfect solution for dynamic video signals with crystal clear video and no color pixel skewing.

You can also use the video channel to convert between the various video formats. For example, the input could be an RGBHV signal from a standard computer while the output device might be a DVI or RGsB monitor.

The user can further enhance the video performance with the use of the video computer USB interface. The data channel allows the user to adjust brightness, contrast, H&V position, picture sharpness, color, etc. It also allows you to customize the unit for non-standard video resolutions and refresh rates.

CONFIGURATIONS:

DigiCool™ products are available as rack mount cards and modules that can be installed in either Meridian's desk chassis or in 19" racking frames. This product requires two standard single slots and can be made into a stand-alone system with the addition of the SR-1002, 2 slot desk/wall mount chassis (87 VAC- 264VAC)

SPECIFICATIONS:

Video

Number of Video Channels	1 of DVI, RGsB (sync-on-green) or RGBHV (TTL H & V sync)
Horizontal Scan Rate	30kHz to 130kHz (auto sensing)
Vertical Scan Rate	60-150Hz (auto sensing)
SNR	>60dB
Resolution Range	640x480x60 to 1600x1200x75
HDTV Resolution supported	480p, 720p (RGB/DVI) 1080i, 1080p (DVI only)
RGB Processing	24-bits, no compression or scaling
Input Impedance/Level	RGB: 75 Ω / 714 mV p-p, H&V 3-5V p-p, 1V p-p w/S.O.G

Audio

In/Out Impedance	47 KOhm Unbalanced
Frequenct Response	10Hz to 18KHz
SNR	>80dB (Weighted) @ 1KHz.
In / Out Level	0 dBm (1VP-Pmax.)
Total Harmonic Distortion	< 0.02% @ 1 KHz
Resolution	16 Bit

Data

USB	2.0
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Optical

Number of fibers	1
Fiber type	Single-mode
Wavelength	1310nm or 1550nm band

Enviromental

Operating Temperature	-10°C to +50°C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing

* Based on maximum resolution & fiber bandwidth

** Due to variations of drivers and diagnostic options, power shown @ max value

Connectors

Video	DVI-I (female) HD-15 female (on dongle)
Audio	3.5mm Phone Jack (two)
Optical	FC, ST (one)
USB	4-pin USB (type A&B)
Power	See SR series chassis for details

Indicators (LEDs)

Power	Green
Diagnostic	Green (OK), Red (alarm)
Tx/Rx Optic	Green (Rx signal), Red (Tx laser error)
USB Active	Red
USB Link	Green
USB Host	Green
DVI active	Green
RGB active	Green
SHV (sync H&V)	Green
SOG (sync on green)	Green
RGB USB active	Green (Rx-Data), Red (Tx-Data)
Audio Error	Red

Physical

Dimensions	160 mm (6.3") L, 127 mm (5") H 40mm (1.60") W
Weight	700 gms (36 Oz)
No. of Slots	2
Module	See SR-1002 Brochure

Quality

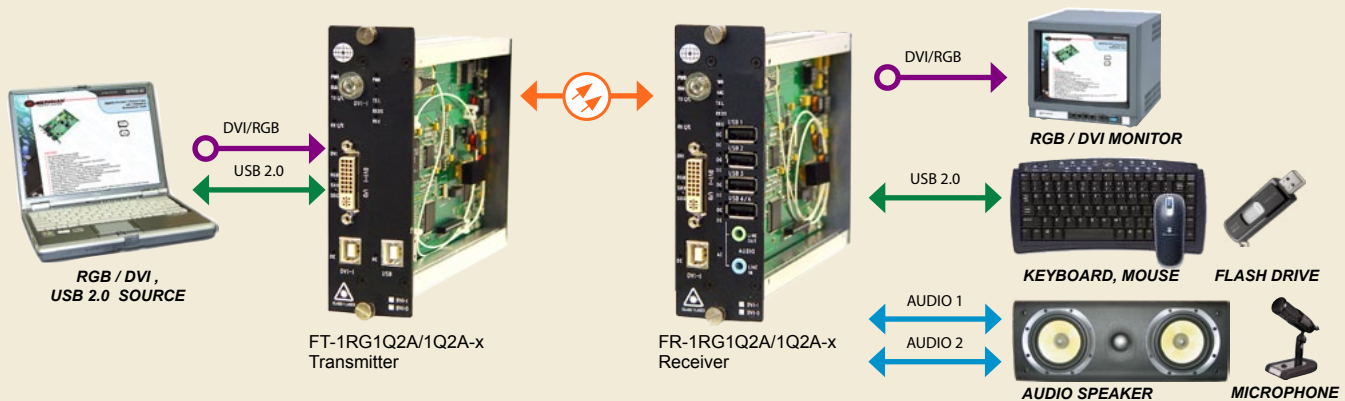
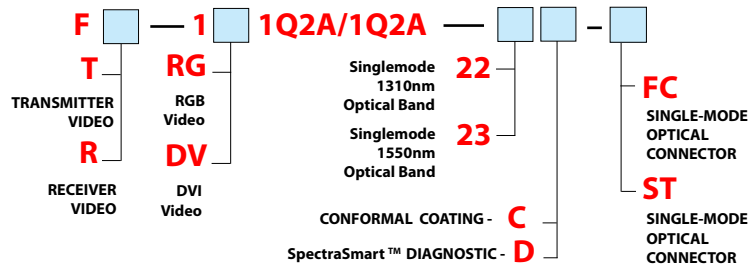
MTBF	>120,000 hours @ Ground Fix 35°C per MIL217F
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Power **

Card	7 Watts
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Part Numbers:

Card	Wavelength
FT/FR-1DV1Q2A/1Q2A-22, FT/FR-1RG1Q2A/1Q2A-22	ch1=1270nm, ch2=1290nm, ch3=1310nm, ch4=1330nm, ch5=1350nm, ch6=1370nm
FT/FR-1DV1Q2A/1Q2A-23, FT/FR-1RG1Q2A/1Q2A-23	ch1=1510nm, ch2=1530nm, ch3=1550nm, ch4=1570nm, ch5=1470nm, ch6=1490nm



Product Optical Code	Fiber Type/Size (μ m)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Max Distance (Km)
22	Singlemode (DFB Laser) 9 / 125	0	-16	16	1310 Band	FC, ST	20	50
23	Singlemode (DFB Laser) 9 / 125	0	-16	16	1550 Band	FC, ST	20	5 ***

*** Distance is limited by chromatic dispersion

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