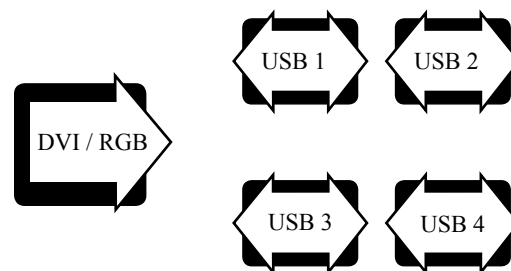
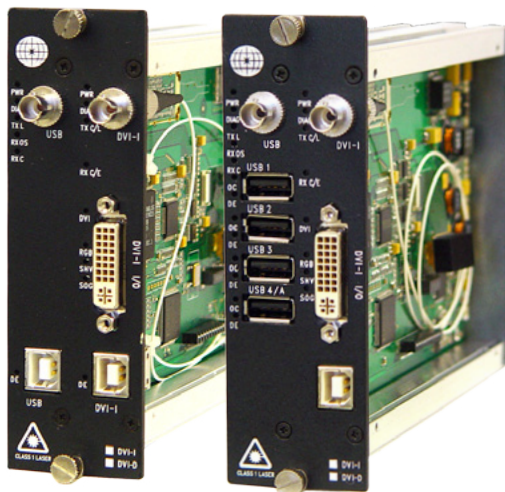


## Digitally-Encoded DVI / RGB Video, USB, Keyboard & Mouse Transmission System



### FEATURES:

- Digital Transmission of DVI, RGBHV, RGsB USB 2.0, Keyboard and Mouse over Dual Multimode Fibers
- USB 2.0 Extender with 4-port Hub
- 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
- Multimode Laser Based Systems

### DESCRIPTION:

Meridian's FT/FR-1RG1Q/1Q-2 and FT/FR-1DV1Q/1Q-2 products are the part of Meridian's DigiCool product family, state-of-the-art, cost-effective, high performance Video/USB/Keyboard/Mouse transmission systems that transports the following signals:

1-ch fully-compliant DVI, RGBHV, or RGsB signal over one multimode fiber and keyboard and mouse over a second, multimode 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 supplied video adapter allow easy interface to standard VGA connectors on computers and monitors.

The FT/FR-1RG1Q/1Q-2 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:

This FT/FR-1RG1Q/1Q-2 product is 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-1000/s, 2 slot desk/wall mount chassis (87 VAC- 264VAC)

### MARKETS:

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

# 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 $\Omega$ / 714 mV p-p, H&V 3-5V p-p, 1V p-p w/S.O.G

## Data

USB .....	2.0
Data Rate .....	480 Mb/s

## Optical

Number of fibers .....	2
Fiber type .....	Multimode (62.5 or 50um)
Wavelength .....	850nm band
Operating distance .....	Up to 1km (50um fiber)* Up to 500m (62.5um fiber)*

## Environmental

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

## Part Numbers:

## Connectors

Video .....	DVI-I (female) HD-15 female (on dongle) ST (two)
Optical .....	4-pin USB (type A&B)
USB .....	See SR series chassis for details
Power .....	

## 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)

## Physical

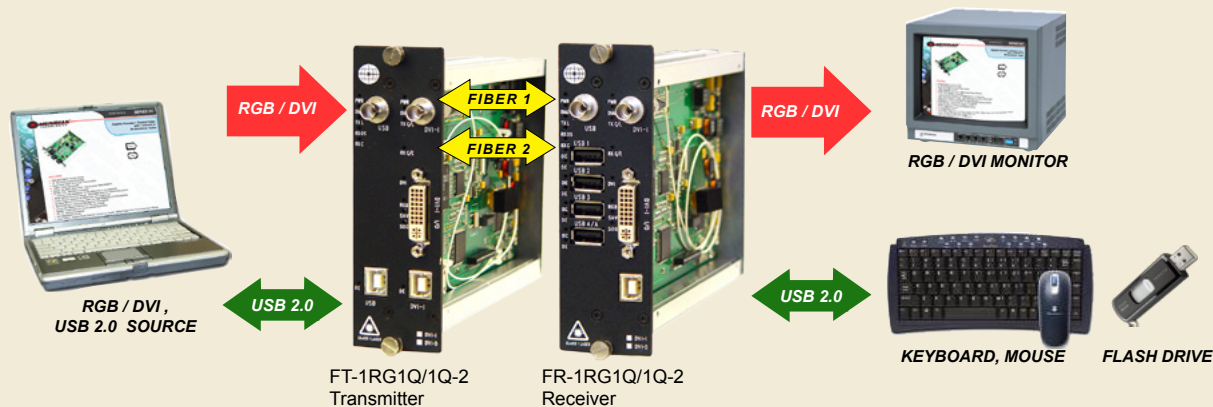
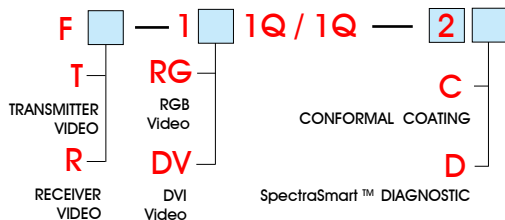
Dimensions (2 Cards) ....	160 mm (6.3") L, 127 mm (5") W 40mm (1.60") W 500 gms (26 Oz)
Weight .....	2
No. of Slots .....	See SR-1002 Brochure
Module .....	

## Quality

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

Card .....	7 Watts
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Laser function	Meridian Optical Code	Fiber Type/Size (um)	Optical Output (dBm)	Receiver Sensitivity (dBm)	Optical Budget (dB)	Wavelength (nm)	Optical Connector	Optical Dynamic Range (dB)	Estimated Max Distance
RGB	2	Multimode (FP Laser) 62.5/125 & 50/125	+2	-8	10	850	ST	15	1km (50um fiber) 500m (62.5um fiber)
KVM	2	Multimode (FP Laser) 62.5/125 & 50/125	-6	-16	10	1300 / 850	ST	24	1km (50um fiber) 500m (62.5um fiber)