



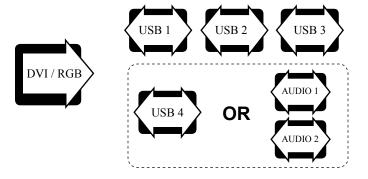
#### **FEATURES:**

- Digital Transmission of DVI, RGBHV, RGsB
- USB 2.0, Stereo Audio, Keyboard and Mouse over Dual Multimode Fibers
- 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
- Multimode Laser Based Systems

## **MARKETS:**

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

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



#### **DESCRIPTION:**

Meridian's DT/DR-1RG1QA2A/1QA2A-x product is part of Meridian's DigiView product family and is a state-of-the-art, cost-effective, high performance Video/USB/Audio/Keyboard/Mouse transmission system that transports the following signals: 1-ch fully-compliant DVI, RGBHV, or RGsB signal over one multimode fiber and keyboard, mouse and 2-ch audio (input/output) 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 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 DT/DR-1RG1QA2A/1QA2A-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:**

This DT/DR-1RG1QA2A/1QA2A-x 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)

# 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 640x480x60 to 1600x1200x75 Resolution Range..... HDTV Resolution supported .. 480p, 720p (RGB/DVI) 1080i, 1080p (DVI only) RGB Processing ..... 24-bits, no compression or scaling Input Impedance/Level ..... RGB:  $75 \Omega / 714 \text{ mV p-p}$ , 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

# **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) |

#### **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 resolusion & fiber bandwidth
- \*\* Due to variations of drivers and diagnostic options, power shown @ max value

#### **Connectors**

| Video   | DVI-I (female)                    |
|---------|-----------------------------------|
| V1000   | HD-15 female (on dongle)          |
|         | ( 6 )                             |
| Audio   | 3.5mm Phone Jack                  |
| Optical | ST (two)                          |
| USB     |                                   |
| 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 (2 Cards) | 160 mm (6.3") L, 127 mm (5") W |
|----------------------|--------------------------------|
|                      | 40mm (1.60") W                 |
| Weight               | 500 gms (26 Oz)                |
| No. of Slots         | 2                              |
| Module               | See SR-1000 Brochure           |

# Quality

| MTBF | >120,000 hours @ Ground Fix |  |  |  |
|------|-----------------------------|--|--|--|
|      | 35°C per MIL217F            |  |  |  |

### Power \*\*

## **Part Numbers:**



For DVI only products: RG part of Part numbers should be changed to DV.



| Optical Specifications |   |                         |                               |                        |                    |                      |                                  |
|------------------------|---|-------------------------|-------------------------------|------------------------|--------------------|----------------------|----------------------------------|
| Laser<br>function      | Fiber Type/<br>Size (um)                  | Optical<br>Output (dBm) | Receiver<br>Sensitivity (dBm) | Optical<br>Budget (dB) | Wavelength<br>(nm) | Optical<br>Connector | Optical<br>Dynamic<br>Range (dB) |
| RGB                    | Multimode (FP Laser)<br>62.5/125 & 50/125 | +2                      | -8                            | 10                     | 850                | ST                   | 15                               |
| KVM                    | Multimode (FP Laser)<br>62.5/125 & 50/125 | -5                      | -23                           | 18                     | 1300/850           | ST                   | 24                               |