Overview

GE's VC8001 Series is now IFS. For use in industrial security and Intelligent Transportation Systems (ITS) applications, the IFS VC8001 Series video and contact closure fiber transceivers feature a robust design well-suited for harsh environments. The IFS VC8001 Series supports 10-bit PCM digital video transmission that provides no video degradation versus optical path loss, as well as, bi-directional contact closure. All modules are laser-based and optimized for the highest optical performance on either one multi-mode or single mode fiber.

The plug-and-play design provides broad-range compatibility with major video surveillance manufacturers. The unique unified modular design can easily be deployed in either stand alone or rack-mount applications. In-field configuration flexibility includes a diverse range of optics and connector choices to meet specific system and connectivity requirements. In addition, remote health and status monitoring can be implemented via the IFS Smart Rack IP Network Module.

Standard Features

Video
- Compatible with NTSC or PAL video standards
- 10-bit digitally encoded (non-compressed) video transmission
- No video degradation over the entire operating distance

Contact Closure
- Bi-directional contact closure
- 2ms response time
- Default state - normally open
- Relay contact rating of 110 VDC/30W; 125 VAC/62.5VA max.

Optical
- One fiber design
- High performance laser-based optics
- Multi-mode or single mode versions
- Distances up to 60Km

Robust Design
- Plug-and-play design, no in-field adjustments required
- Unified modular design for stand alone or rack-mount installation
- Hot-swappable design with solid-state current limiters
- Wide operating temperature range of -40º C to +75º C
- Designed for use in harsh environments

Local & Remote Diagnostics
- Service-friendly LED status indicators on both front and rear of the module provide for local monitoring and diagnostics
- Remote health and status monitoring via Smart Rack IP Network Module

Warranty
- Comprehensive Lifetime Warranty
Typical Application

Specifications

Video
- Video I/O: 1 volt pk-pk (75 ohms)
- Bandwidth: 6 Mhz
- Differential Gain: <2%
- Differential Phase: <1° Typical
- Tilt: 0.01
- SNR-CCIR Weighted: > 55 dB

Contact Closure
- Operating Mode: Bi-directional (Duplex)
- Input Type: TTL Logic (positive)/Dry Contact
- Output Type: Default: Logic Low/Normally Open
- Dry Contact Output Rating: 110 VDC/30W, 125VAC/62.5VA max.
- Contact Output Response Time: 2 mSec.

Optical
- Emitter Type: Laser diode
- Wavelength: 1310/1550nm
- Number of Fibers: 1

LED Indicators
- Video Presence: Green/Present; Red/Absent
- Contact Status: Open/Off; Closed/On (Blinking Green LED)
- Power: Green/On

Connectors
- Video: BNC
- Contact Closure: 5-pin screw terminal
- Optical: ST (Standard); optional SC or FC connector kits available
- Power (surface-mount): 2-pin screw terminal block
- Power (rack-mount): 30-pin smart bus connector

Electrical & Mechanical
- Operating Voltage: 12VDC
- Current Draw: 500mA Max.
- Current Protection: Automatic resettable fuse
- Dimensions (in./cm.) (HxWxD): 2.0 x 6.2 x 9.1 in. (5.08 x 15.84 x 23.18 cm)
- Shipping Weight: 2.4 lbs. / 1.07kg (2-slot)

Environmental
- MTBF: >100,000 hours
- Operating Temperature: -40° C to +75° C
- Storage Temperature: -40° C to +85° C
- Relative Humidity: 0 to 95% non-condensing
- Regulatory Compliance: FCC, UL, CE, C-Tick, FDA

Ordering Information

<table>
<thead>
<tr>
<th>Fiber</th>
<th>Part Number</th>
<th>Description</th>
<th>Wavelength</th>
<th>Optical Pwr Budget*</th>
<th>Max. Distance**</th>
<th>Rack Slots</th>
</tr>
</thead>
<tbody>
<tr>
<td>VC6001 Series 8-Ch Video Mux/1-Ch Contact Closure Transceiver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-mode</td>
<td>DFVMMD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 MM Fiber</td>
<td>1310/1550nm</td>
<td>6 dB</td>
<td>.62 miles (1km)</td>
<td>2</td>
</tr>
<tr>
<td>62.5/125µm</td>
<td>DFVMMD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 MM Fiber</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single mode</td>
<td>DFVSMD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 SM Fiber</td>
<td>1310/1550nm</td>
<td>14 dB</td>
<td>25 miles (40km)</td>
<td>2</td>
</tr>
<tr>
<td>9/125µm</td>
<td>DFVSMD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 SM Fiber</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFVSMLD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 SM Fiber, LD</td>
<td>1310/1550nm</td>
<td>19 dB</td>
<td>37 miles (60km)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DFVSMLD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 SM Fiber, LD</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For 50/125 fiber, subtract 4dB from optical power budget
** Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
Operating distance for multi-mode is limited by fiber bandwidth due to the inherent characteristic of modal dispersion within MM fiber.
Note: Power supply must be ordered separately.

Accessories

<table>
<thead>
<tr>
<th>Connector Kits</th>
<th>SC/FC-OA</th>
<th>SC to FC Optical Adaptor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC/SC-OA</td>
<td>SC to SC Optical Adaptor</td>
</tr>
<tr>
<td></td>
<td>SC/ST-OA</td>
<td>SC to ST Optical Adaptor</td>
</tr>
<tr>
<td>Cable Kits</td>
<td>SC/LC-MM-FPC</td>
<td>SC to LC MM Fiber Patch Cord</td>
</tr>
<tr>
<td></td>
<td>SC/LC-SM-FPC</td>
<td>SC to SC Optical Adaptor</td>
</tr>
<tr>
<td>Smart Rack Chassis</td>
<td>DFR</td>
<td>Smart Rack –Chassis Only</td>
</tr>
</tbody>
</table>

Security Products by GE are now part of the UTC Fire & Security family

North America
T 855-286-8889
F 503-691-7566
E sales@ifs.com

Asia
T 852-2907-8108
F 852-2142-5063

Australia and New Zealand
T 613-9239-1200
F 613-9239-1299

Europe
T 44-113-238-1668
F 44-113-253-8121

Latin America
T 561-998-6100
F 561-994-6572

interlogix.com
ufcfireandsafety.com
Specifications subject to change without notice.

© 2011 Interlogix, A UTC Fire & Security Company.
All rights reserved.

GE and the GE monogram are trademarks of the General Electric Company and are under license to UTC Fire & Security, 9 Farm Springs Road, Farmington, CT 06034-4065

Ordering Information

Fiber | Part Number       | Description                                                                 | Wavelength | Optical Pwr Budget* | Max. Distance** | Rack Slots |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VC6001 Series 8-Ch Video Mux/1-Ch Contact Closure Transceiver</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-mode</td>
<td>DFVMMD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 MM Fiber</td>
<td>1310/1550nm</td>
<td>6 dB</td>
<td>.62 miles (1km)</td>
<td>2</td>
</tr>
<tr>
<td>62.5/125µm</td>
<td>DFVMMD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 MM Fiber</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single mode</td>
<td>DFVSMD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 SM Fiber</td>
<td>1310/1550nm</td>
<td>14 dB</td>
<td>25 miles (40km)</td>
<td>2</td>
</tr>
<tr>
<td>9/125µm</td>
<td>DFVSMD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 SM Fiber</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DFVSMLD8001-T</td>
<td>8-Ch Digital Video Mux TX/1-ch Contact Closure TCVR, 1 SM Fiber, LD</td>
<td>1310/1550nm</td>
<td>19 dB</td>
<td>37 miles (60km)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>DFVSMLD8001-R</td>
<td>8-Ch Digital Video Mux RX/1-ch Contact Closure TCVR, 1 SM Fiber, LD</td>
<td>1310/1550nm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* For 50/125 fiber, subtract 4dB from optical power budget
** Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
Operating distance for multi-mode is limited by fiber bandwidth due to the inherent characteristic of modal dispersion within MM fiber.
Note: Power supply must be ordered separately.