DigiSlim™

High Performance Fiber-Optic
Transmission Systems

MERIDIAN
TECHNOLOGIES

DigiSlim™ Gives You the Performance Edge

DigiSlim™ Video/Audio/Data Transmission Systems

Meridian's single-slot DigiSlim™ line of fiber-optic transmission equipment provides you the customer with a wide combination of standard and unique Video/Audio/Data transmission products. From a single-channel 10-bit digitally-encoded video channel to a full complement of video and multi-channel bi-directional Audio, Data and Contact Mapping, this DigiSlim product family is by far the most versatile in the industry today.

Quality at an Economical Price with SpectraView™ On-Screen Diagnostics System at No Additional Cost

Features

Available in popular configurations, stand alone or rack mounted

Meets RS-250C Short Haul transmission specifications, with NTSC, PAL, and SECAM compatibility

Real-time 10 Bit uncompressed video

Transmission of video, audio, data, and contact mapping signals

24-bit audio processing

Multiprotocol data channels - field configurable

RS-232, RS-422, RS-485, bi-phase, Manchester data formats

Local LED status indicators to monitor critical performance parameters

Hot-swappable cards eliminate need to power down system for maintenance or upgrades

SpectraView™ On-Screen Diagnostics

SpectaSmart™ PC based Network Management System (optional)

Compatible with all Meridian's Chassis

...For data sheets of popular configurations, visit www.meridian-tech.com

DigiSlim™

Meridian's DigiSlim™ product family delivers high performance plus channel versatility and flexibility.

⊕Selection

Choose the desired signals for transmission

⊕Specifications

Accurate and verifiable

⊕Speed

Short lead times and fast delivery

⊕Service and Support

Expert technical support both before and after the sale. Free application and design assistance

⊕Satisfaction

Total company commitment to client satisfaction

Available Configurations

- 1 Channel Video
- 2 Channel Video
- 4 Channel Video
- Video + Return Multiprotocol Data
- Video + Return Multiprotocol Data + Forward Audio
- Video + Bi-Directional Multiprotocol Data
- Video + Bi-Directional RS-422 Data For Direct Mounting In Pelco Spectra III Dome
- Video + Bi-Directional Contact Closure
- Video + Audio
- Video + 2 Audio
- Video + Bi-Directional Audio
- Video + Bi-Directional Multiprotocol Data + 2 Bidirectional Audio + 2 Bi-directional Contact Closures
- Video + 2 Bi-Directional Multiprotocol Data
- Video + 2 Bi-Directional Multiprotocol Data + Bi-Directional Contact Closure
- 1 or 2 Data (One direction)
- 1 or 2 Bi-Directional Multiprotocol Data
- 2 Audio (One direction)
- 2 Bi-Directional Audio

Applications

Homeland Security

Security and Surveillance

Intelligent Transportation Systems

Access Control

Professional Audio/Video

Broadcast Studios

Campus Lecture Networks

Intelligent Courtrooms

SCADA Networks

Video Conferencing

Medical Imaging

All manufacturing done on Meridian's premises by automated robotic assembly equipment

Specifications

Video

Digital encoding	10-bit standard
	8-bit (4-ch mux/demux modules)
Format	NTSC, PAL, SECAM
Voltage/impedance	1 Vp-p, 75 ohm
Bandwidth	5 Hz to 6.8 MHz
Differential gain	<0.6%
Differential phase	<0.3 deg
SNR	>60 dB (8 bit), >67 dB (10 bit)
Connector	75 ohm BNC (Gold Center Pin)

Audio

Digital encoding	24 bit
I/O impedance	600 ohms, balanced
	47 kohms, unbalanced
	(Field selectable)
I/O level	-8 to +8 dBm
Frequency response	10 Hz to 20 kHz
THD	<0.01%, 1 kHz @ max. modulation
SNR	>90 dB (weighted)
Connector	3-Pin screw terminal block
	(1 data/audio channel)
	DB25F (Multiple channels)

Data

Format	RS-232D, RS-422A,
	RS-485 (2 or 4 wire)
	Manchester bi-phase,
	TTL (Field selectable)
Data rate	DC to 150 Kb/s

BER	$>10^{-9}$
Connector	3-Pin screw terminal block
	(1 data/audio channel)
	DB25F (multiple channels)

Contact Mapping

Contact rating	30 V AC/DC @ 300 mA
Connector	3-Pin screw terminal block
	(1 data/audio channels)
	DB25F (multiple channels)

Diagnostic Indicators

Green	Power
Bi-color	Tx carrier/Laser overcurrent
Bi-color	Rx carrier present/error
Bi-color	Video present/overload
	(one per channel on mux/demux)
Green	Video Sync present (one per channel)
Green	Data present (one per channel)
Bi-color	Audio present/overmodulation
	(one per channel)
Green	Contact Closure present
	(one per channel)

Enviromental

Operating temperature range	-40°C to +75°C
Storage temperature range	-55°C to +85°C
Relative humidity	0 to 95% noncondensing

For product-specific information, see appropriate data sheets. Specifications and features subject to change without notice.

Intuitive Part Number System

The DigiSlim product line has an intuitive part numbering system to allow the user to easily configure the exact part number he needs. No need to use a numeric system that has no relationship to the actual part required. Examples of this include:

ST-1W1G/1G-2 — Digital transmitter with one 10-bit video channel and one, multiprotocol data channel on multimode fiber

SXA-1G2A/1G2A-5 — Digital transmitter (side "A") with one bi-directional multiprotocol data channel and two bi-directional audio channels

For more information or for additional configurations contact your local Meridian Sales Representative or Meridian directly.

DigiSlim Product Part Number Guide

Channel Type
Channel Qty

S

T - Transmitter
R - Receiver
X - Transceiver

S - Single Slot

A	Audio
C	Contact Mapping
G	Multiprotocol (RS-232, RS-422, RS-485)
V	Video - 8 bit
W	Video - 10 bit

1	MM, 1300 nm
2	MM, 850/1300 nm
3	SM, 1310 nm
5	SM, 1310/1550 nm

ST - connector
FC - connector
D - Diagnostics
C - Conformal coating
R - Rack mount
M - Module

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