GE Interlogix
Fiber Options

S708V
S7708V

8-Channel Digital Video Multiplexer

Product Specification

Features

✔ **Eight video channels on a single fiber**

✔ **Digital multiplexing technology**

✔ **10-bit digital encoding**

✔ **500 TV lines resolution**

✔ **Color or monochrome**

✔ ***SMARTS™* Diagnostics**

✔ **Optical Automatic Gain Control**

✔ **Solid-state short-circuit protection**

✔ **Forever Warranty™**

Description

Fiber Options' S708V/S7708V Digital Video Multiplexer system uses revolutionary CWDM technology to provide simultaneous long-range transmission of multiple full-frame, real-time video signals over one multimode fiber.

The eight-channel system features a bandwidth of 6.2 MHz per channel and optical automatic gain control (OAGC). It accepts analog baseband input signals and converts them to digital format for transmission, assuring high-quality video outputs at the receiver.

Fiber Options' unique ***SMARTS™*** Technology includes a built-in video test pattern generator on the transmitter for system setup and on-screen diagnostics to indicate insufficient optical power or an inactive video channel for each output.
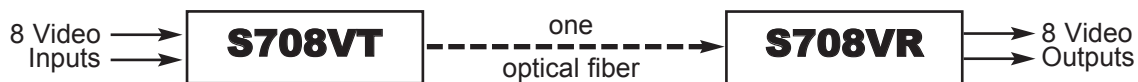
Basic Multimode Models

S708V   1-Fiber link, 850/1300 nm
S708V-L   1-Fiber link, 1310/1330 nm

Basic Single-Mode Models

S7708V   1-Fiber link, 1310/1550 nm

SYSTEM DIAGRAM

8 Video Inputs → **S708VT** ---- one optical fiber ----→ **S708VR** → 8 Video Outputs

VIDEO

Number of Channels:	8	Video Bandwidth:	6.2 MHz
Standards Supported:	NTSC, PAL, SECAM	Video Resolution:	500 TV lines
Video Input/Output Signal:	1.0 V p-p composite	Differential Phase:	0.7°
Input/Output Impedance:	75 Ω	Differential Gain:	2%
Signal-to-Noise Ratio:	>55 dB		

ELECTRICAL

Input Voltage:
  Standalone Modules: 13.5 VDC, regulated
  24 VAC
  Rack Modules: 13.5 VDC, regulated
Current Requirement:
  Standalone Modules: 700 mA
  Rack Modules: 1.2 A
Rack Module
  Power Factor: 10
Power Consumption:
  Standalone Modules: 10 W
  Rack Modules: 17 W
 Protection: Solid-state short circuit protection (no fuse required)
 Card Replacement: Cards are hot swappable
 Power Supply: 613P

OPTICAL

Optical Mode:
  S708V: Multimode
  S708V-L: Multimode
  S7708V: Single Mode
Wavelength:
  S708V: 850/1300 nm
  S708V-L: 1310/1330 nm
  S7708V: 1310/1550 nm
Optical Budget:
  S708V: 13 dB*
  S708V-L: 13 dB
  S7708V: 16 dB
Operating Distance**:
  S708V: 1.2 mi (3.2 km)
  S708V-L: 3.2 mi (5.2 km)
  S7708V: 20 mi (32 km)
Emitter Type: Laser
Fiber Type: Multimode: 62.5 μm
  Single Mode: 8.3 μm
Gain Control: Optical automatic (OAGC)
Transmitter Launch Power:
  S708V: -15 dBm
  S708V-L: -15 dBm
  S7708V: -12 dBm
Receiver Sensitivity: -28 dBm

 *Optical Budget based on 62.5/125 um fiber, for 50/125 um fiber subtract 3 dB.
 **Operating distance is approximate and assumes best fiber. It will be affected by the type and number of splices in the fiber. Refer to update no. TB00-005, which can be found at www.fiberoptions.com.

ENVIRONMENTAL

Temperature Range
  in Operation:-40° to +167° F (-40° to +75° C)
  in Storage: -40° to +185° F (-40° to +85° C)
Humidity Range in Operation and Storage:
    0 to 95% relative, noncondensing

MECHANICAL
Standalone Transmitters
Dimensions: Height: 5.0 in (127 mm)
  Width: 4.8 in (122 mm)
  Depth: 2.2 in (56 mm)
Weight: 1.8 lb (0.82 kg)
Construction: Steel
Finish: Gray textured paint
Mounting Method: 6 No. 6 (3 mm) screws

Standalone Receivers
Dimensions: Length: 9.31 in (236 mm)
  Width: 6.33 in (161 mm)
  Height: 2.15 in (6 mm)
Weight: 2.24 lb (1.02 kg)
Construction: Aluminum
Finish: Black semigloss paint
Mounting Method: 4 No. 6 (3 mm) screws
Rack Modules
Module Width: 2 slots, 2.0 in (51 mm)
Weight: 1.24 lb (0.56 kg)
Construction: Aluminum
Finish: Black semigloss paint

SMARTS™ INDICATORS
Level/Loss™, Video In, Video Out, Laser Fail

AGENCY COMPLIANCE AND MTBF

Emissions: FCC Part 15, ICES-003, AS/NZS 3548, EN55022
Immunity: EN50130-4, EN61000-3-2, -3
Safety: UL1950, CAN/CSA 22.2, NO.950-95
Laser Safety: 21CFR1040; EN 60825-1,2
MTBF: >100,000 hours

FCC PART 15 COMPLIANT CE c(UL)us

For additional information about this product, refer to the Fiber Options Web site at www.fiberoptions.com.