

Model 575X



Optical 8 Channels Optical Inputs & Outputs



Features

- Optical Input Trigger
- Optical Input Gate
- Electrical and Optical Outputs
- Selectable Wavelength (820/1300nm)
- Low Additional Cost

Applications

- EMI Testing
- Isolation of Trigger/Gate
- Component Testing
- Photonics R&D
- LAN 100Base-SX Testing

The Model 575-X (Optical) allows for end users to include optical inputs and outputs on an existing 575 design. The inputs are currently offered at 820nm and 1300nm, and some customization is possible. For outputs, a user may also select from 850nm and 1310nm, and on 2, 4, 6 or all 8 channels. The Optical options for the 575 are ideal for pulse power, linear accelerator work, or any other application where noise (EMI) could be problematic.

Key Specifications

- Front Panel ST Connectors
- 820nm or 1300nm
- Compatible with 50/125, 62/125, 100/125 or 200uM Fiber
- Supports Signal Rates to 160MBd
- Optical Gate, Trigger or Gate+Trigger
- Dual Optical Trigger Option

Specifications

Delays

Range	0-5000s
Resolution	250ps
Timebase	25ppm (1ppm optional)
RMS Jitter	200ps
Pulse Inhibit Delay	150ns
Output Inhibit Delay	150ns

System External Trigger Input(s)

Number	2 1 0
Rate	DC to 1/(0.2us + longest delay)
Threshold	0.2 to 15 VDC
Maximum Input Voltage	60 V Peak
Resolution	10mV
Slope	Rising or Falling
Impedance	1000 ohm
Jitter	800ps RMS
Insertion Delay	100ns

Gate Input(s)

Number	0 1 2
Threshold	0.2 to 15 VDC
Maximum Input Voltage	60 V Peak
Resolution	10mV
Polarity	Active High/Active Low
Function	Pulse Inhibit or Output Inhibit
Channel Behavior	Global w/ Individual Channel Enables

Internal Rate Generator

Rate	0.0002 Hz to 20.000 Mhz (40 Mhz optional)
Resolution	5ns
Accuracy	Same as timebase
Jitter	200ps
Settling	1 cycle
Burst Mode	1 to 10,000,000

Electrical inputs

Number	0, 1 or 2
Rate	DC to 1/(0.2us + longest delay)
Threshold	0.2 to 15 VDC
Maximum Input Voltage	60 V Peak
Resolution	10mV
Impedance	1 Mohm + 40pF or 50ohm
Function(s)	Individual Channel Trigger/ Gate/Follower
Trigger Slope	Rising or Falling
Gate Polarity	Active High or Active Low
Trigger Jitter	< 2ns

Optical Outputs

Number	2, 4 or 8
Wavelength	820nm or 1310nm
Max Signal Rate	5 MBd
Max Link Distance	1.5km
Connector Type	ST
Resolution	500ps
Accuracy	1 ns + .0001 x Delay

Optical Inputs

Number	0,1 or 2
Wavelength	820nm or 1310nm
Max Signal Rate	5 Mbd
Max Link Distance	1.5km
Connector Type	ST
Resolution	500ps
Accuracy	2 ns + .0001 x Delay
Optical Trigger	2412
Trigger Delay	< 300ns
Jitter	< 15ns

Standard Features/Functions

Communications	USB/RS232
Global Gates/Triggers	2 Global Gate/Trigger Inputs
Channel Gates/Triggers	Optical/Electrial Available (5ns Jitter)
External Clock In	10 MHz - 100 MHz User Selectable in discrete values
External Clock Out	10 MHz - 100 Mhz User Selectable in discrete values
Command Set Compatibility	Backwards Compatible