Wiegand® Code Interface   WT/WR-7001

For Industry Standard Wiegand[1] Applications

The **Litelink**® WT/WR-7001 system consists of the WT-7001 transmitter and WR-7001 receiver. Both units utilize digital encoding techniques to transmit and receive the Wiegand code interface over a single optical fiber conductor. The Wiegand interface industry standard, SIA AC-01 (1996.10), defines a commonly used interface between card readers and control panels used for Access Control, Security, Time and Attendance, and other related industries.
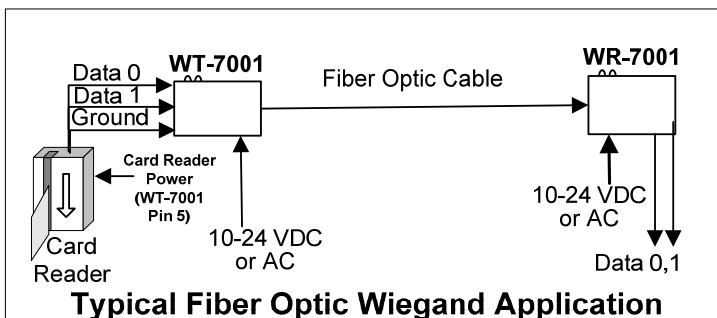
Both multimode and single-mode versions are available and installation is adjustment free. Integral LEDs are provided on both units to continuously indicate the presence of Data 0, Data 1 signals, and operating power making system troubleshooting simple. The WT-7001 also provides a regulated 5V DC output for powering access control devices.

Technical Specifications

Channels	Data 0 and Data 1
Input / Output Impedance	1 K ohms
Input / Output Level	5 volts and 0 volts
Data Pulse Width	20 to 100 usec typical
Data Pulse Interval	1 to 2 msec typical
Indicator Lights	Pwr, Link, Data 1/0, Alarm
Transmitter Power Output	+5 VDC @500 mA(max)
Operating Wavelength	850, 1310 or 1550nm
Optical Loss Budget	0-12dB (multimode)
	0-12dB (single-mode)
Optical Connectors	ST (multimode)
	FCPC (single-mode)
Signal Connector	BNC
Operating Temperature	-35° to +75°C
Humidity	<95% non condensing
MTBF (per MIL HBK 217)	>120,000 hours
Power Requirements**	11-24 VAC/DC @150 mA
Physical Size (mm)	5.0" (127) x 3.0" (76)
	x 1.0" (25.4)

Note that all specifications are subject to change without prior notice.

Typical Fiber Optic Wiegand Application

Important Features

- *Data 0 & Data 1 on single fiber*
- *Signal & Power Indicators*
- *Multimode or Single-mode versions*
- *Stand-alone, DIN or Rack Mountable (same unit)*

Ordering Information

Transmitter   WT-7001-X
Receiver   WR-7001-X

"X" = Wavelength/Fiber

-1 =   850nm Multimode
-3 = 1310nm Multimode
-7 = 1310nm Single-mode
-9 = 1550nm Single-mode

 **For stand-alone operation order a PS- 1205 power supply for each unit.
 **For rack mounted operation all operating power is provided by power supply used with the rack mounting panel.

Wiegand® is a trademark of EMERSON ELECTRIC CO, and is used here to indicate the "Access Control Standard - Wiegand Card Reader Interface: SIA AC-01 (1996.10)"

Litelink®
Fiber Optic Transmission Systems

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