GE-Interlogix-CASI
Model-240 Proximity Reader

9/17/2002

Description

The GE-Interlogix-CASI Model 240 access control badge reader is an ISO standard compliant, proximity technology badge reader. The Model 240 reader will read ISO-14443 and ISO-15693 badges and key tags. The reader's aesthetically pleasing contemporary design and light gray housing will complement any decor.

Features:

- Compatible with Micro/5 2RP and 8RP controllers (not M/5-2SRP)
- Compatible with all Micro/PX(N)-2000 controllers
- Sealed electronics, suitable for outdoor installation
- Tamper switch protected
- Reads ISO-14443 and ISO-15693 access control badges and tags
- Reads badge or tag serial number, no memory sector records required
- User interface: 3-LEDs and beeper
- Fast field maintenance, field wiring plug
- Up to 4" read range (badge type and installation conditions dependent)
- 4-state input supervision of door contact & REX switch: opened, closed, cut, short
- Reader supervision: continuously monitored by the microcontroller

Specifications

- Mount: on single width USA or European style electrical box or directly on wall
- Material: ASA plastic housing; polyurethane encapsulated electronics
- Housing dimensions: 3.34 x 4.40 x 0.96 inch: (85 x 112 x 24.2 mm)
- Temperature range: -13 to 140 °F /-25 to +70 °C
- Power supply: 8VDC to.30 VDC @ <100 mA
- Electrical protection: Reverse polarity diode protection on power lines
- Data Lines: high-speed transient voltage suppressor diodes
- Protection type: IP 65 (IEC 529). Suitable for outdoor installation
- Frequency: 13.56 MHz
- Approvals: FCC,CE-EN 300 330
- Read distance: up to 2 inches ISO-14443 or up to 4 inches ISO-15693
- Microcontroller firmware versions: Picture Perfect 1.7 or greater recommended
- Interface: Supervised F/2F
- Electrical connection: 12 position plug-in strip connector with screw terminals
- Beeper: controlled by SF2F protocol
- Red LED: controlled by SF2F protocol
- Green LED: controlled by SF2F protocol
- Yellow LED: internal controlled
- RS-485 for reader firmware maintenance and configuration
- Casi pn: 430177001

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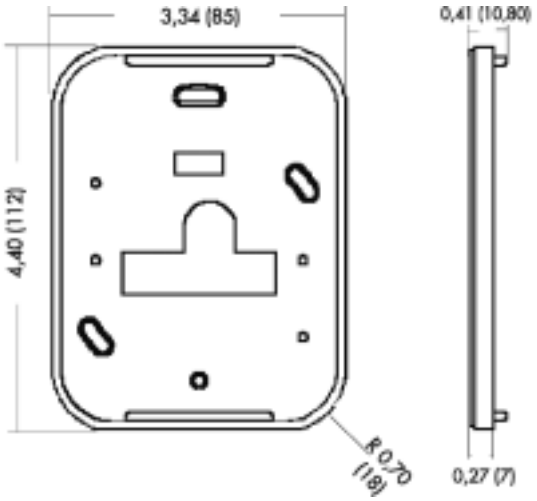
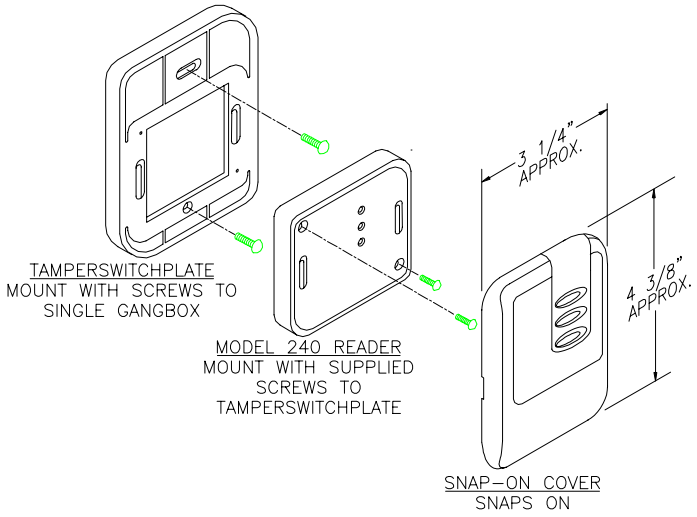
FCC Cautionary Comment
Modifications to the Model-240 reader not expressly approved by GE-Interlogix may void the FCC approval.

Model 240 Back plate



Note: Mounting holes fit a standard US single width electrical box and standard European electrical box hole patterns.

Installation



Installation Considerations

1) Installation of the Model 240 reader on metal

The table below shows the expected read range reduction when a Model 240 reader is mounted onto a metal plate or wall.

Distance	Reading distance
No metal plate	100 %
1.78 inch (4.5 cm) use 4 Surface Mount Extension plates	100%
1.06 inch, (2.7 cm) use 3 Surface Mount Extension plates	85 %
0.70 inch (1.8 cm) use 2 Surface Mount Extension plates	70 %
0.35 inch (0.9 cm) use 1 Surface Mount Extension plate	50 %
Reader placed on metal wall	10 %

2) Installation of two Model 240 readers side by side

Read range is not affected if the center-to-center distance between two readers is equal to or greater than 6-inches (15 cm). If the distance between the two readers is less than 6-inches (15 cm), field interference between the two readers may result in the creation of a dead spot in the badge read field.

Attention

Two readers may simultaneously read the same badge or tag if the distance between the two readers is less than 12-inches (30 cm), center-to-center.

3) Installation of two Model 240 readers back to back

For proper operation, readers installed back-to-back must be separated by at least 3.2 inches (8cm).

Attention

Two readers may simultaneously read the same badge or tag if the distance between the two readers is less than 6-inches (15 cm), back-to-back.

When using two readers back-to-back on a wall that will separate the two readers by 6 inches (15 cm) or less, a metal plate (for example aluminium, 4-inches square (10cm x 10cm) must be placed between the readers. To obtain the maximum read range, mount each Model 240 reader onto one or more ***Surface Mount Extension plates***. Note the impact on badge read range performance, as discussed in manual section, "*Installation Considerations"* (above).

Wiring

Reader 12-position field wiring plug		Microcontroller
1	Micro control, reader beeper (option)	Micro/5PX(N) 2RP and 8RP, see Micro/5 manual. DO NOT use the Model 240 reader with M/5-S2RP
2	Ground	
3	Power, 8VDC to 30VDC	
4	Door Contact	
5	Reader data	
6	Exit Request (REX)	
7	Green LED	Micro/PX-2000 Micro/PXN-2000 See micro manual
8	Micro control, red LED (option)	
9	RS-485-A, reader firmware maintenance	
10	RS-485-B, reader firmware maintenance	
11	Future	Micro/Reader- Junction Box See manual
12	Future	

Reader to Micro wiring distance

The maximum reader to micro cable distance is 1,000 feet (305 meters) from the microcontroller using 4-conductor 22AWG (0.6438mm) shielded cable.

Access Control system compatibility

The Model-240 badge reader will output a 16-digit badge identification (BID) number. As a result, the Model-240 reader is only compatible with Picture Perfect access control systems. The Model-240 reader is not compatible with Secure Perfect, Secure Perfect Enterprise Edition, SP, or SP-Enterprise Edition access control systems, (12-digit BID number limitation).

Picture Perfect

A 16-digit BID format must be defined within Picture Perfect. Refer to the Picture Perfect On-line help for assistance. In brief, go to Access / Badge Formats. Enter a suitable badge format description, example: "16-digit BID" and define the format: "%16S" (omit the quote characters).