Honeywell

3900

Fixed Position Linear Imager

The 3900 is a fixed position linear imager that adds bar code scanning to kiosks and other OEM applications. The 3900 uses linear imaging technology to deliver a bright, sharp aiming line, and fast reading and decoding that makes scanning intuitive and simple.

Bar code scanning at a kiosk is typically done by someone without scanning experience. The scan line must be easy to see. The scanner must read quickly, without perfect orientation, and read a wide variety of bar code labels. Since the bar code is presented to the scanner, the scanner must have a large working range. The 3900 does all this and more. The 3900 has an automatic trigger mode for constant scanning, or can be used in a presentation mode, where the scanner turns on when a bar code is placed in its viewing area. Scanning can also be controlled by the host computer via serial commands.

The 3900 has interface flexibility, too. The 3900 can connect via keyboard wedge, RS-232 serial interface, or into USB ports in IBM-compatible PCs or Apple computers. Models are available for use with IBM 4683, 4693, or OCIA retail terminals.



Features

- Bright, Sharp and Focused Aiming Line: Easy scanning by inexperienced users in any lighting condition.
- Powerful, Flexible Architecture: Connects and interfaces to all major PCs and Apple® computers. Windows®based programming tools provided for easy setup and configuration.
- 100,000 Mean Time Between Failure and 5-Year Warranty: Long, reliable in-service life.
- **Real World Reading Performance:** Reads faded labels, short quiet zones, dot matrix printing, and printer-induced bar space variations.

3900 Specifications

Performance			
Illumination:	630 NM Visible Red	LED	
Receiving Device:	3648 element linear imager		
Reading Distance:	From 2.5 in. (6.35 cm) to 9 in. (22.8 cm) on medium density codes		
Reading Width:	5 in. (12.7 cm) code width at 7 in. (17.8 cm) distance		
Resolution:	3 mil. at 3.5 in. (8.8 cm) distance		
Skew Angle:	<u>+</u> 30°		
Pitch Angle:	±15°		
Horizontal Velocity:	2 in. (5.1 cm) per second		
Minimum Reflectance Difference:	30%		
Scan Rate:	Programmable to 270 scans per second		
Decode Rate:	270 decodes per second		
Mechanical/Electrical			
Dimensions			
Length:	4.7 in. (11.9 cm)		
Height:	1.5 in. (3.8 cm)		
Width:	3.1 in. (7.9 cm)		
Housing:	Polycarbonate/ABS blend, UL 940VO		
Power Requirements:	5Vdc ± 10% at scanner		
Current Draw:	Scanning	<u>Standby</u>	Low Power
@270 s/s @67 s/s	275mA 150mA	125mA 125mA	30mA 30mA
@67 s/s		125mA	30mA
@67 s/s Power Supply	150mA	125mA ak to peak, 10 to	30mA 100 kHz
@67 s/s Power Supply Noise Rejection:	150mA Maximum 100mV pe	125mA ak to peak, 10 to er mode, or via se	30mA 100 kHz
@67 s/s Power Supply Noise Rejection: Triggering:	150mA Maximum 100mV pe Continuous autotrigg	125mA ak to peak, 10 to er mode, or via se	30mA 100 kHz
@67 s/s Power Supply Noise Rejection: Triggering: Mounting:	150mA Maximum 100mV pe Continuous autotrigg	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to +	30mA 100 kHz erial command -50°C)
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to +	30mA 100 kHz erial command -50°C)
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded Operating: +32°F to Storage: -4°F to 140	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60°	30mA 100 kHz erial command 50°C) C)
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded Three M-4 threaded Operating: +32°F to Storage: -4°F to 140 0 to 95%	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60°	30mA 100 kHz erial command 50°C) C)
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded if Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d	125mA ak to peak, 10 to er mode, or via se inserts 0+122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4	30mA 100 kHz erial command 50°C) C)
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock: Ambient Illumination:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d 0 - 70,000 lux	125mA ak to peak, 10 to the rer mode, or via set inserts 0 +122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4 / discharge	30mA 100 kHz erial command -50°C) C) 53 m) to concrete
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock: Ambient Illumination: ESD Protection:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded if Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d 0 - 70,000 lux Functional after 15kV Withstands 5G peak	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4 / discharge from 20 to 300 H2	30mA 100 kHz erial command -50°C) C) 53 m) to concrete
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock: Ambient Illumination: ESD Protection: Vibration:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded if Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d 0 - 70,000 lux Functional after 15kN Withstands 5G peak	125mA ak to peak, 10 to ler mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4 / discharge from 20 to 300 H: //C Class B, CE Lo	30mA 100 kHz arial command 550°C) (C) 53 m) to concrete
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock: Ambient Illumination: ESD Protection: Vibration: Agency:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d 0 - 70,000 lux Functional after 15kV Withstands 5G peak FCC Class B, CE EM per MIL-HDBK-217F	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4 / discharge from 20 to 300 H: // C Class B, CE Lo Ground Benign e 9 including PARAF	30mA 100 kHz arial command 550°C) C) 53 m) to concrete z z bw Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV
©67 s/s Power Supply Noise Rejection: Triggering: Mounting: Environmental Temperature Humidity: Mechanical Shock: Ambient Illumination: ESD Protection: Vibration: Agency: MTBF:	150mA Maximum 100mV pe Continuous autotrigg Three M-4 threaded in Operating: +32°F to Storage: -4°F to 140 0 to 95% Operational after 5 d 0 - 70,000 lux Functional after 15kN Withstands 5G peak FCC Class B, CE EN per MIL-HDBK-217F Codabar, Code 3 of 5 JAN, China Postal C	125mA ak to peak, 10 to er mode, or via se inserts 0 +122°F (0°C to + 0°F (-40°C to +60° rops from 5 ft. (1.4 / discharge from 20 to 300 H: // C Class B, CE Lo Ground Benign e 9 including PARAF ode, RSS. terminals via keyt	30mA 100 kHz erial command 50°C() C() 53 m) to concrete z pow Voltage Directive, IEC60825-1 LED Safety: Class 1, UL, cUL listed, TÜV exceeds 100,000 hours

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