ProxID Reader GP30

Data Sheet June 7, 1999 Rev1.41

The GP30 is a very high performance proximity reader featuring long range and small dimensions. The unit will run from any voltage from 5 to 13.5vdc. The GP30 features high read range at voltages as low as 5 volts making it ideally suited to a wide variety of applications, particularly access control.

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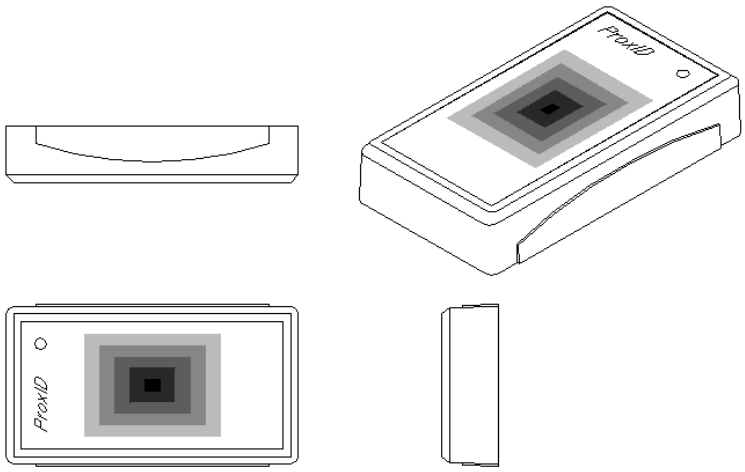
Power Requirements	5-13.5 volt regulated DC. at 65 mA typical with a 12v supply. A linear regulator is recommended.
Interface	Wiegand, Magstripe, 9.6K Baud Serial ASCII (RS232) or special to customer specifications.
Typical Maximum Read in ideal conditions	Range 32cm at 13.5v and 20 cm at 5v with ISO card
Frequency	125KHz standard or 134.2KHz to special order.
Transponder	Read Only.
Audio/Visual Indication	Internal LED and Buzzer
Dimensions	10.3 x 6.3 x 2.0 cm
Temperature Range	-10 to 60 Deg C.
Interface Cable	90cm.



Output Assignment

Red	Power 5-13.5 Volt
Black	Power 0 Volt
White	Clock Output (Magstripe , Wiegand1) 4K7 pull up
Green	Data Output (RS232, Magstripe & Wiegand0) 4K7 pull up
Orange	Card Present Output 4K7 pull up
Yellow	Program Input 4K7 pull up
Blue	External Beep. Positive Logic 5V on.
Brown	LED (External source).

Output Format

The output format can be customer programmed. The available formats are Wiegand, Magnetic Emulation, Clock Data and Serial ASCII (RS232)

Wiegand

Red	Power +V
Black	Ground 0v
White	Data1
Green	Data0
Yellow connect to White (Data0, Clock output)	

Magstripe

Red	Power +V
Black	Ground 0v
Green	Data
White	Clock (Strobe)
Orange	Card Present
Yellow	Connect to Orange

Serial ASCII (RS232)

Red	Power +V
Black	Ground 0v
Green	Tx Data
Yellow	No connection

Data Structure (Serial ASCII)

Baud Rate: 9600, N, 8,1

STX(02 HEX)	DATA	CR	LF	ETX (03 HEX)

The start character is factory defined as an 'STX' (02 HEX). The CR\LF characters serve to bring the received screen text back to the left hand side and on the line below after the data bytes have been sent. The 'ETX ' (03 HEX) character denotes the end of the current transmission.

Data Structure (Mag-stripe emulation, ABA Track 2)

Speed : Simulated to 40 IPS (Inch per second)

10 LEADING ZEROS	SS	DATA	ES	LRC	10 TRAILING ZEROS

The leading zeros prepare the receiving unit to accept the data. SS is the Start Sentinel consisting of 11010. ES is the End Sentinel consisting of 11111. LRC is the Longitudinal Redundancy Check character. Lastly there follows trailing zeros.

PROGRAMMING THE OUTPUT FORMAT

The programming input may be connected in the following ways to choose between the available output formats.

1) Serial ASCII	Leave Program Input Open Circuit
2) Wiegand	Connect Program Input to Clock Output
3) Clock Data**	Connect Program Input to Data Output
4) Magnetic Emulation	Connect Program Input to Card Present
5) Customer Interface **	Connect to Zero Volts

**(to special order only. Minimum 1k pieces)

ENVIRONEMENTAL ADJUSTMENT

If the reader is fixed onto a metal surface capacitors may be attached to the orange and yellow cable pair exiting the back of the reader to readjust the tuning.