PCN-1001

Automatic Passenger Counter - RS-485 Interface



- **Autonomous Passenger Counting System**
- **Stereoscopic Vision Technology**
- **Lightweight and Robust**
- **EN50155 and Automotive**
- **Daisy Chainable**
- **RS-485 Interface**
- **Easy to Install**

Features

Stereoscopic Cameras - Stereoscopic vision technology enables an accurate people bidirectional count, ideal for real-time optimization of resources and services
Reliable Operation - A built-in infrared illumination system allows a precise counting in any type of lighting condition
Lightweight and Robust - Extended operating temperature range, IP65 ingress protection, and sealed magnesium enclosure allow the PCN-1001 to work in a wide range of climatic conditions
EN50155 and Automotive - Certified for Rolling Stock and Automotive applications, where consistent performance and reliability are a must
Daisy Chainable - Two or more PCN-1001 can be interfaced together in order to precise count people passing through wide doorways
Easy to Integrate - The PCN 1001 can be used stand-alone or in conjunction with an IoT Edge Gateway, that enables data transmission to different Cloud platforms
Easy to Install - The installation is easy and unobtrusive thanks to its flush mountable and compact design, adaptable to different roofs and door structures; moreover a user-friendly configuration software allows a quick and easy setup

Description

The PCN-1001 (DynaPCN 10-01-00) is a compact, low power, autonomous device based on non-contact stereoscopic vision technology. It has been specifically designed for passenger counting above the doorways in buses and trains; it can also be used to count people as they enter or leave buildings or any area with restricted access.

Stereoscopic cameras capture images of the area below the device. Thanks to the integrated high luminosity infrared LED indicators it can operate in any type of lighting condition. The extended temperature range capabilities allow integrators to use the device in a wide range of climatic conditions.

The PCN-1001 analyses the height, shape and direction of any object passing the field of view; if the object is recognized as a person entering or leaving, the incoming and outgoing counters are incremented accordingly, along with time and date information.

Data transfer is made via a RS-485 interface. The onboard insulated digital I/O interfaces can be used to directly communicate with intelligent doors or flow control systems, guaranteeing optimal functionality at all times: for example, stop counting when the doors are closed.

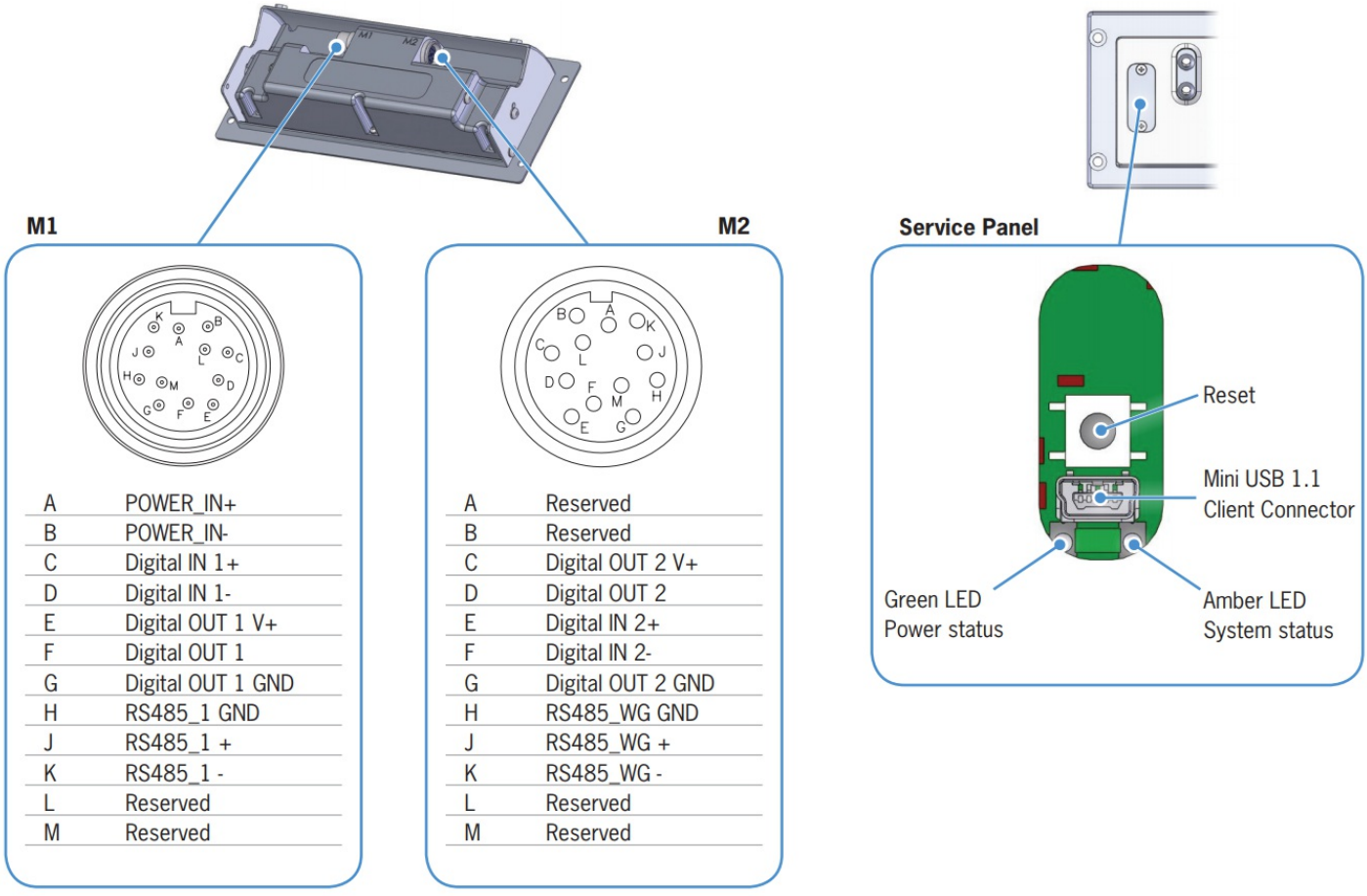
The PCN-1001 can be easily mounted in the ceiling space above a doorway becoming almost invisible. The angle of the optical panel can be adjusted from 0° to 45°; allowing it to be placed in an ideal position even if the mounting surface is not horizontal.

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Specifications

COUNTING	Technology	Stereoscopic Image Capturing
	Accuracy	98%
	Precision	99%
I/O INTERFACES	USB	1x USB 1.1 Client (Service Panel) - Type B Mini
	Serial	1x RS-485 (on 12pin Circular Connector), 1x RS-485 for Daisy Chain (on 12pin Female Circular Connector)
	Digital I/O	2x Insulated Digital Input, 2x Insulated Digital Output - on 12pin Circular Connectors
OTHER	LEDs	1x Power (Green), 1x System Status (Amber)
	Buttons	1x Reset (Service Panel)
POWER	Input	9 - 36VDC
	Consumption	Max Power Consumption: 3.2W with Infrared Illuminators OFF, 7.8W with Infrared Illuminators 100% ON
ENVIRONMENT	Operating Temp	EN50155 Class T1 (Factory Option: EN50155 Class TX)
CERTIFICATIONS	Compliance	Automotive E24: ECE ONU Reg.10 – Fire Protection: EN45545 – EMC Emissions: EN50155 / EN50121 / EN50011 – EMC Immunity: EN50155 / EN50121 / EN61000 – Environmental: EN50155 – Vibrations & Shocks: EN50155 / EN61373
	Ingress	IP65
MECHANICAL	Enclosure	Sealed Magnesium Alloy Enclosure
	Dimensions	FRAME: 100x230x3mm (Height x Width x Thickness) – REQUIRED CUT-OUT: from 82x209x42mm (Height x Width x Depth, frame at 0°) to 82x209x70mm (Height x Width x Depth, frame at 45°)
	Weight	0.6Kg



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