



- **AI-based Classification**
- **Drop-in Replacement for Previous Generation**
- **Autotuning**
- **Easy Installation**
- **ITxPT Ready**
- **Automotive and Rolling Stock certifications**
- **Antitamper**
- **Open Platform**

## Features

**AI Classification :** A powerful AI engine provides adult vs child classification and can be optionally expanded to recognize wheelchairs, strollers, bicycles and custom objects and scenes

**Drop-in Replacement :** Form, Fit and Function replacement for previous generations of Eurotech People and Passenger Counters (PCN-1001, DynaPCN 10-20), including the serial versions

**Autotuning :** A smart autotuner optimizes the parameters to get the optimal performance and eliminates all the time consuming guesswork

**Easy Installation :** A greatly improved mechanical designed dramatically simplifies and accelerates the physical deployment in the vehicle

**ITxPT Ready :** Designed to meet ITxPT, with support for Ethernet and PoE on a M12 connector

**Automotive and Rolling Stock :** Certified for E-Mark and EN50155, EN45545, with extended operating temperature, isolated interfaces and a wide range, protected power supply

**Antitamper :** An antitamper mechanical design eliminates the need for a service panel and greatly improves the physical resilience against physical tampering

**Open Platform :** Features Everyware Software Framework (ESF), the IoT Java/OSGi based-middleware for IoT gateways that accelerates gateway development and enables remote management

**Open, No-lock-in :** Based on open standards and Cloud agnostic, it can be integrated with all major platform and service provides

## Description

The DynaPCN 10-30 is a rugged People Counter certified for Public Transport, Road Vehicles and Rolling Stock that adds advanced AI capabilities to traditional people counting function.

The powerful AI engine that comes with the DynaPCN 10-30 provides adult vs child out-of-the-box capabilities and can optionally support additional classification models to enable the recognition of bicycles, strollers, wheelchairs; additional ad-hoc classification models can be developed as a Professional Service.

The DynaPCN 10-30 offers a simple and efficient opportunity to adopt or migrate to the most advanced requirements: for new deployments, it provides a smooth path towards ITxPT, while for existing fleets, it brings the latest capabilities while keeping a full Form-Fit-Function compatibility with Eurotech previous generation People/Passenger counters, including the ones based on serial communication.

Thanks to a smart autotuning function, the DynaPCN 10-30 dramatically improves the configuration time, completely removing the guesswork that is typically required to reach the optimal performance in a real-world deployment; the physical installation time is also very fast, thanks to an improved mechanical design that positions the connector in an installer-friendly location and that offers a range of options for cabling, from rugged low-cost DB15 up to ITxPT M12

The DynaPCN 10-30 also provides a high level of tamper resistance with an innovative design that eliminates the need for a service panel, removing a critical attack point and delivering at the same time a superior aesthetic experience.

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Ordering code: DYPCN-10-30-XX

XX		-03	-13
VISION	3D Camera	Time of Flight, QVGA @30fps Resolution, 850mm Wavelength	
	2D Camera	RGB, 2Mp Resolution	
COUNTING	Accuracy	>99%	
	Precision	>99%	
ILLUMINATOR	Type	Infrared	
AI CLASSIFICATORS	Classes	Adult vs Child; Wheelchair, Bicycles and Strollers (Factory Option)	
VIDEO	Live Streaming	H.264	
	Event Recording	Factory Option	
I/O INTERFACES	Ethernet	1x 10/100Mbps	
	PoE	No	Yes
	Serial	1x RS-485 Isolated	
	Digital I/O	1x Input (24VDC Optoisolated)	1x Input (24VDC Optoisolated); 1x Output (24VDC Isolated)
CYBERSECURITY (HARDWARE)	TPM	TPM 2.0	
	Service Panel	No Service Panel	
OTHER	RTC	Yes, with SuperCAP (up to 15 Days Retention)	
	Watchdog	Yes - Dedicated Chip	
	EEPROM	256 Kbit	
	Sensors	3D Accelerometer, 3D Gyroscope, Microphone, Temperature, Humidity	
	LED	1x System, 1x Debug	
CONNECTORS	System Connector	1x DB15	
	Adapters	1x DB15 to 1x M12 ITxPT; 1x DB15 to 1x M12 Eurotech PCN-1001/DynaPCN 10-xx; 1x DB15 to Other Style (Factory Option)	
POWER	Input	6-60VDC (24 and 48VDC Nom) Surge, Noise, Rev Polarity, Overvoltage & Short Protection, Load Dump	PoE+
	Power Backup	10s Hold-up After Power Failure (Safe-shutdown) Configurable Sleep Timer, to Manage Shutdown	
	Consumption	<10W Typical (15W Max.)	<10W Typical (13W Max.)
ENVIRONMENT	Operating Temperature	-40 to +70°C TX/OT4 According to EN50155	
	Storage Temperature	-40 to +85°C	
	Humidity	5 to 95% Relative Humidity (Non-condensing) at +40°C	
CERTIFICATIONS	IoT Platform	AWS IoT Core Qualified; Microsoft Azure Certified; Everyware Cloud Native	
	Regulatory	UE/UK: CE, UKCA; North America: FCC, ISED	
	Safety	EN 62368, UL 60950 (§)	
	Rolling Stock	EN50155, EN45545	
	Automotive	E-Mark R10, ITxPT, SAE J1455	
	Environmental	ROHS3, REACH	
	Ingress	IP65	
MECHANICAL	Enclosure	Material: Aluminum – Magnesium Alloy; Color: Black Anodized	
	Dimensions	Frame: 100x230x3mm (Height x Width x Thickness); Cut-Out: from 82x209x42mm (Height x Width x Depth, Frame at 0°) to 82x209x70mm (Height x Width x Depth, Frame at 45°); Mechanically Compatible with Eurotech People Counters	
	Installation Height	1.9m Min., 2.5m Max.	
	Detection Width	1.6m Min., 2.5m Max.	

§ UL, NRTL listing Factory Option.

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