Modular Social Distancing Solution – Eurotech's answer to Social Distancing Requirements

PCN

Ordering code: DYPCN-10-20-XX

XX		-00	-01
COUNTING	Technology	Stereoscopic Image Capturing	
	Accuracy	98%	
	Precision	99%	
I/O INTERFACES	Ethernet	1x 10/100Mbps	1x 10/100Mbps PoE Ethernet
	USB	1x USB 1.1 Client (Service Panel) - Type B Mini	
	Serial	1x RS-485 for Daisy Chain (on 12pin Female Circular Connector)	
	Digital I/O	2x Insulated Digital Input, 1x Insulated Digital Output - on 12pin Female Circular Connectors	
OTHER	LEDs	1x Power (Green), 1x System Status (Amber)	
	Buttons	1x Reset (Service Panel)	
POWER	Input	9 - 36VDC	Power Over Ethernet IEEE 802.3at Mode A (4 wires) Class 0 Compliant
	Consumption	3.2W with Infrared Illuminators OFF, 7.8W with Infrared Illuminators 100% ON	3.5W with Infrared Illuminators OFF, 8.0W with Infrared Illuminators 100% ON
ENVIRONMENT	Operating Temp	EN50155 Class T1 (Factory Option: EN50155 Class TX)	
CERTIFICATIONS	Compliance	Automotive E24: ECE ONU Reg.10 (in PoE Version: Designed to Meet) – Fire Protection: EN45545 EMC Emissions: EN50155 / EN50121 / EN55011 – 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) – 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	

Thermal and Mask Unit

TEMP. DETECTION	Range	Range: 35~42°C Precision:±0.1°C
	Distance	10cm-50cm, optimal:10cm
FACE DETECTION	Recognition Speed	<100ms
	Live Detection	Supported
	Mask Detection	Supported
VISUAL FEEDBACK	Screen	7" LCD
POWER	Input	12VDC Nominal
	Consumption	5W Typical
ENVIRONMENT	Operating Temp	10°C ~50°C

Portal

DIMENSIONS	Height	Total: 2400mm (Approx) - Internal Passage: 2340mm (Approx.)
	Width	Total (Portal): 1850mm (Approx.) - Internal Passage: 1570mm (Approx.) - Including Base: 2210mm (Approx.)
	Depth	Total (Portal): 220mm (Approx.) - Including Base: 740mm (Approx)
	Weight	140Kg (Approx)
MATERIAL	Structure	Metal

Signaling

ALARM	Type	LED Bar
	Color	Red/Green

Battery Pack

Factory Option; Contact Us for more Information

BENEFITS

- ENABLES PANDEMIC CONTROL PROCEDURES & DISASTER PREVENTION
- REAL-TIME MONITORING
- EASY QUICK AND MODULAR INSTALLATION
- REAL-TIME INFORMATION AND SIGNALING ON-SITE
- STANDALONE OR MULTI-DEPLOYMENT
- AI DRIVEN INSIGHTS
- IT ENFORCES THE RESPECT OF SOCIAL DISTANCING RULES
- REMOTE DEVICE MAINTENANCE AND CONFIGURATION
- EASY INTEGRATION WITH DASHBOARDS AND SMARTPHONE APPS

APPLICATIONS

ETH_Modular Social Distancing Solution_12/2020

Introduction

Eurotech's Modular Social Distancing Solution is an integrated set of hardware and software components to enable safe access to areas where mass gatherings may occur.
Through the accurate and precise screening of specific key criteria, it is possible to guarantee the correct flowing of people in accordance with safety regulations.
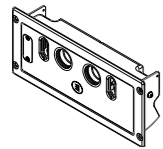
The kit is suitable for indoor and outdoor deployments and consists of specialized modules that can be easily integrated in a complete system by the customer.
One key capability of the kit is to cross-map different parameters and process data in real-time, enabling the implementation of sophisticated detection schemes and providing metrics on usage.
Data collected by the kit can be monitored and analyzed remotely thanks to the integration with a cloud platform.

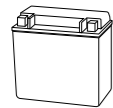## Components

Main Kit

People Counter (DynaPCN 10-20)
An accurate and precise automatic people counting sensor to count the number of entries and exits across the monitored area.

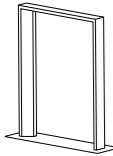**Multi Service IoT Edge Gateway (ReliaGATE 10-12)**
Provides the edge processing platform to manage the data collected by people counters, and cloud connectivity for remote device configuration and data integration with dashboards and applications.
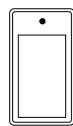
Accessories

Power supply
A portable battery to power the kit components. The structure can alternatively be connected to the main power line.

Movable/Portable Options
The system can be mounted on a movable structure than can fit any customer re-configuration needs.

Display with integrated thermal imaging camera
Provides real-time temperature detection and can provide a visual feedback. It integrates a thermal imaging camera that can detect abnormal face temperature and if the subject is wearing the mask.

Signaling
Frontal and rear green and red led lights indicate if a person is allowed to enter a defined area, according to the number of people already in the area, the detection of a mask on the person's face or abnormal temperature.

Application Areas

The integrated solution proposed by Eurotech allows the flexibility to support different kinds of use cases. The kit can be easily placed in outdoor environments, such as concerts and sport events, or indoor environments, such as museums, cinemas, and theaters. Its hardware and software modularity maximizes the benefits for the system integrator, accelerating time to market and delivering significant savings.
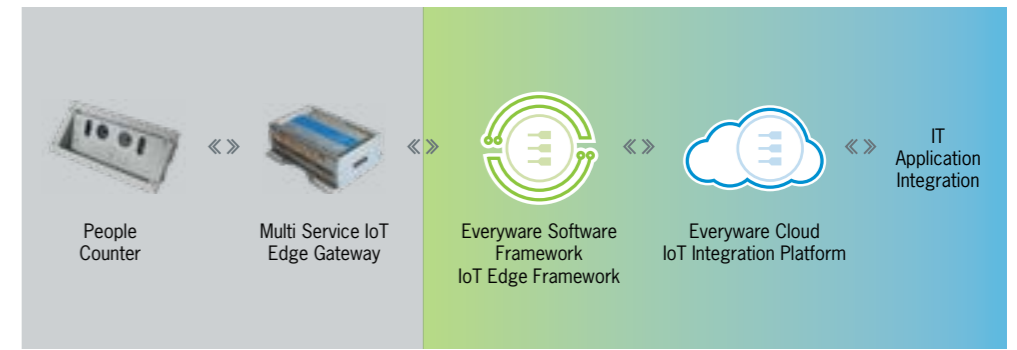
Museums

Indoor Arenas

Events

Solution

The integrated solution proposed by Eurotech has the added value of intersecting the performance of the hardware modules of the kit with the benefits of the Everyware IoT Architecture. This integrated infrastructure allows the development of dedicated applications tailored to the specific event needs. Real-time data can be integrated into dashboards to allow device status monitoring and precise mapping of the collected parameters.

People Counter «» Multi Service IoT Edge Gateway «» Everyware Software Framework IoT Edge Framework «» Everyware Cloud IoT Integration Platform «» IT Application Integration

Gateway							
Ordering code: REGATE-10-12-XX							
	XX	-62	-63	-64	-65	-66	-67
PROCESSOR	CPU	TI AM3352 1GHz, 1 Core					
MEMORY	RAM	1GB DDR3					
STORAGE	Embedded	8GB eMMC					
	Other	1x microSD Slot (User Accessible)					
I/O INTERFACES	Ethernet	2x 10/100Mbps - RJ45					
	USB	3x Host 2.0 (Noise and Surge Protected) - Type A					
	Serial	1x RS-422/RS-485 protected and isolated, 1x RS-232/RS-485 (Surge Protected, RS-485 Termination and Fail-safe Resistors), 1x TTL Serial Console					
	CAN 2.0B	2x CAN bus with 5V (100mA) Power Out					
	Digital I/O	2x Digital Input 36V, 1KV Optoisolated – 2x Digital Output (40VAC/DC), 500mA Sink, 1KHz Max Switching					
	Exp. Connector	Yes, for Eurotech Side Expansion Modules (ReliaIO 10-12, ReliaWAN 10-12)					
RADIO INTERFACES	Internal Cellular	No	LTE Cat 1 (NA), 3G Fallback	LTE Cat 1 (EU), 2G/3G Fallback	LTE Cat 1 (NA), 3G Fallback	LTE Cat 1 (EU), 2G/3G Fallback	LTE Cat 1 (JP)
	External Cellular	Optional Accessory: ReliaCELL 10-20 (3G/4G)					
	GPS	Factory Option: Internal (72 channels GPS, Galileo, GLONASS, BeiDou) – Optional Accessory: ReliaCELL 10-20 3G					
	Wi-Fi / BT	a/b/g/n, BLE 4.2	No		a/b/g/n, BLE 4.2		
	Antennas (Ext.)	2x RSMA Wi-Fi/BT	2x SMA Cellular		2x SMA Cellular, 2x RSMA Wi-Fi/BT		
OTHER	RTC	Yes (User Accessible Battery)					
	Ext. Watchdog	Yes					
	TPM	TPM 2.0					
	Sensors	Temperature, 3-axis digital Accelerometer, 3-axis digital Gyroscope					
	LEDs	1x Power, 1x Cellular, 4x Programmable					
	Buttons	1x Reset, 1x Programmable					
	SIM Slot	No	2x microSIM (User Accessible)				
POWER	Input	Nominal: 12 or 24 VDC; Range: 9 to 30 VDC with transient protection					
	Consumption	2W Idle (15W Max)					
ENVIRONMENT	Operating Temp	- 40 to +70°C					
	Storage Temp	- 40 to +85°C					
	Humidity	5 to 95% Relative Humidity (non condensing) at +40°C					
CERTIFICATIONS	Regulatory	CE, FCC, ISED	FCC, ISED	CE	FCC	CE	JATE, TELEC
	Medical	Designed to be compliant with IEC60601-1-2					
	Safety	EN 62368-1, UL 60950 (§)					
	Environmental	RoHS3, REACH					
	Wi-Fi / BT Radio	RED, FCC, ISED	FCC, ISED	RED	FCC	RED	JATE, TELEC
	Cellular Radio	No	FCC, ISED, PTCRB, AT&T, Verizon	RED	FCC, ISED, PTCRB, AT&T, Verizon	RED	JATE, TELEC
	Ingress	IP40					
MECHANICAL	Enclosure	Material: ABS - Color: Aluminum					
	Dimensions	139x115x46 (LxWxH) - with SMA Connectors and Mounting Bracket					
SOFTWARE	OS	Eurotech Everyware Linux					
	SDK	Yocto-based Eclipse Tooling, Azul Java					
	IoT Framework	Everyware Software Framework (Java/OSGi)					
	IoT Platform	AWS IoT Core Qualified, Microsoft Azure Certified, Everyware Cloud Native					

§ UL, NRTL listing Factory Option.

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