ReliaIO 10-12

I/O Expansion Module



- **Industrial Grade**
- **ReliaGATE Compatible**
- **4x Isolated Digital Inputs**
- **4x Isolated Digital Outputs**
- **4x Protected Analog Inputs**
- **Open Platform**
- **Customizable**

Features

Industrial Grade - Compact and sturdy, with reliable terminal block interfaces and a wide operating temperature range
ReliaGATE Compatible - Designed to be a companion for the ReliaGATE 10-12, expands the gateway capabilities with extra digital and analog ports
4x Isolated Digital Inputs - Supporting 0-36V input range and optionally customizable 0/1 level thresold
4x Isolated Digital Outputs - Open drain output transistors rated 60V, up to 0.5A output and clear LED status indication
4x Protected Analog Inputs - Supporting 0-36V input range and 12bit @1KHz sampling
Open Platform - Supported by Everyware Software Framework (ESF), the IoT Java/OSGi based-middleware for IoT Edge Gateways that accelerates gateway development and enables remote management
Customizable - Personalization and full customization options are available, ranging from branding ("skins" and color) to deep HW/SW configurations

Description

The ReliaIO 10-12 is a fast and simple way to expand the capabilities of Eurotech Multi-service IoT Edge Gateways with extra digital and analog ports.
Designed to be fitted to the side of the ReliaGATE 10-12, it is rated for the same level of reliability and operating temperature range.
The ReliaIO 10-12 features a high performance 32bit MCU to offload the gateway, delivering highly consistent performance under any load.
The digital section of the ReliaIO 10-12 supports 4x isolated digital inputs and 4x isolated digital outputs, while the analog section provides 4x protected analog inputs.
The ReliaIO 10-12 is supported by Everyware Software Framework (ESF), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/ OSGi middleware for IoT Edge Gateways.
Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech IoT Integration Platform (separately available).
The ReliaIO 10-12 can be personalized and customized for additional capabilities through Eurotech Professional Services.

ReliaIO 10-12

I/O Expansion Module

Ordering code: REIO-10-12-01		
PROCESSOR	MCU	STM 32F072XX - 32 bit ARM Cortex M0
MEMORY	RAM	16KB SRAM with Hardware Parity
STORAGE	Embedded	128KB Flash
I/O INTERFACES	Digital Input	4x Digital Input Ports – 0-36V Input Range, 5kV (2.7kV RMS) Optoisolation, 0-1V Low Level Voltage, 2-36V High Level Voltage, 1V/2V 0/1 Level Threshold (Customizable as Factory Option)
	Digital Output	4x Digital Output Ports – 5kV (2.7kV RMS) Optoisolation, 60V Open Drain Output Transistors, 0.5A MOSFET AC/DC Output (with 0.5A Fuses)
	Analog Input	4x Analog Input Ports – 0-36V Input Range, 12bit Sigma Delta ADC Conversion, 1kHz Max Sampling Frequency, Input Protection Circuitry (5kV DC). Factory Option: 4-20mA Current Loop Compatibility
	Other Input	Factory Options: 3x PWM Programmable Inputs, 1x Odometer Mode, 1x Phase Angular Encode Mode. All Optional Inputs with Optoisolation: 5kV (2.7kV RMS)
OTHER	LEDs	4x Digital Output Status, 2x Programmable
POWER	Input	Provided by ReliaGATE 10-12
	Consumption	0.3W Typ.
ENVIRONMENT	Operating Temp	- 25 to +85°C
	Storage Temp	- 40 to +85°C
CERTIFICATIONS	Regulatory	CE, FCC, ISED
	Safety	EN 62368, UL 60950 (§)
	Environmental	RoHS2, REACH
	Ingress	IP40
MECHANICAL	Enclosure	Material: ABS - Color: Aluminum
	Dimensions	90.4x43.7x58 mm (LxWxH)

Software		
SOFTWARE	IoT Framework	Everyware Software Framework (Java/OSGi)

(§) UL, NRTL listing Factory Option.

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