Suitable for data collection – remote control - telemetry systems – real-time data processing

Datasheet

IoT-Gateway options

The IoT-Gateway is a multifunctional data collection, control and telemetry system that employs the ultra-low power Windows-embedded operating system. The IoT-Gateway consists of a wide selection of connectivity options using its Windows 10 built-in network and web support (e.g. TCP/IP, FTP, MQTT over Wi-Fi, LAN or Mobile 4G). The IoT-Gateway comprises of a high-level connectivity options such as communicating directly to SQL data base, direct communication to ASP and PHP data services including direct cloud connectivity.

Standard remote connectivity tools such as windows RDP and TeamViewer solutions can be used as a local and remote visualization solution. A wide variety of communication hardware options are available such as standard Wi-Fi, standard LAN connectivity and 4G/5G (cellular modem not included).

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Key features

- Ability to process real-time data from fast incoming data streams. For example fast wind sensors then save the result to its built-in 10GB flash memory with the option to save RAW data.

- Ability to maintain multiple data connection at the same time with different systems (e.g. having active RDP connection while uploading data to data server).

- Low-power operation.

- Ability to integrate a camera.

- Built-in GPIO capability to control various hardware.

- Ability to add or expand to various communication ports using standard USB connectivity.

- Flexible programming and updates can be delivered via Wi-Fi or 4G (Industrial PC).

Common specifications

Temperature operating range	- 25°C to +50°C
Power consumption	10V to 24V, 3.5W to 4.5W
Connectivity	Wi-Fi, LAN, 4G LTE (cellular modem not included)
Connectivity protocol	FTP, HTTP, XML POP3, SMTP with directly communication to SQL data base, direct communication to ASP and PHP data services, many cloud-based data services such as Amazon IOT, Microsoft Azure
Programming	C# via Visual Studio (Pre-program from the factory for each user)
Internal storage	10 GB
Camera option	Yes
Direct alarm alerting	SMS and emails
Analog input	4ch,16bit, selectable voltage/current input

Options

• Compact	Mini IoT-Gateway
• Extended	Maxi IoT-Gateway

Mini IoT-Gateway options

Digital IO	Two RS422
	One RS485/SDI-12
	Two analog inputs
	One rain input
One relay	Watchdog system restart
Power output	Three 12V, 1A output
Power consumption	Under 250mA @ 12VDC (without sensor)
Dimensions	80x250x55xmm (W x L x D)
	Depends on selected options
Weight	0.5Kg

Maxi IoT-Gateway options

Digital IO	One RS422/RS232
	Four RS422
	Two RS485/SDI-12
	Four analog inputs
	One rain input
Two relays	Watchdog system restart
	External device
	(e.g. diesel generator start)
Power output	Seven 12V, 1A output
Power consumption	Under 300mA @ 12VDC (without sensor)
Dimensions	190x280x150xmm (W x L x D)
	Depends on selected options
Weight	1Kg
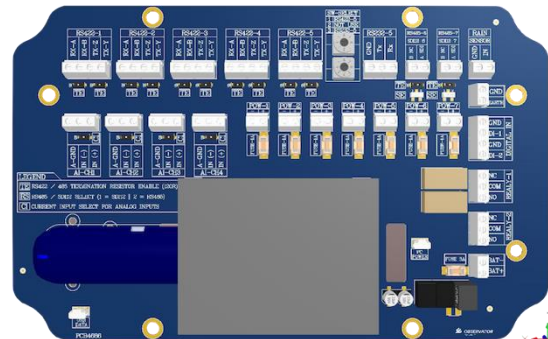
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