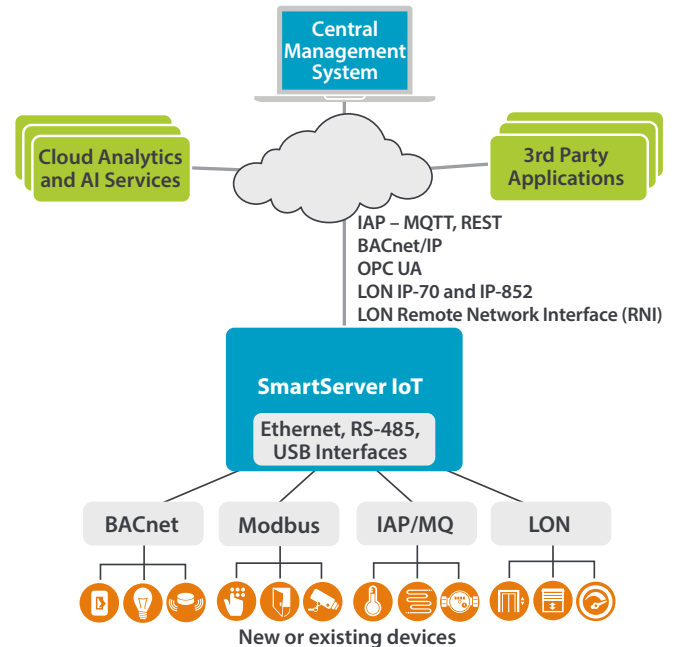


SmartServer™ IoT Edge Server



SmartServer IoT delivers device data via IoT Access Protocol

Product Description

The SmartServer IoT is an extensible and open multi-protocol IoT edge server for smart buildings, factories and cities. It provides out-of-the-box access to industrial sensors and devices, and open interfaces to web services and industrial clients such as BMS, CMS and SCADA systems. The SmartServer IoT provides planning, management, monitoring and control services of smart devices, to simplify operational workflows. It may be used as a standalone server or integrated with another control system and is capable of both local and remote monitoring and control. SmartServer IoT features libraries for third parties to easily create drivers and extend the capabilities to any industrial network.

IoT Access Protocol

SmartServer IoT features Renesas's IoT Access Protocol™ (IAP) API that unlocks the value of data within existing automation and control networks as well as new industrial IoT networks. This API provides open interfaces via IoT-standard MQTT and REST protocols. Using the API, developers can create local or remote applications and web pages that provision, manage, monitor and control field IoT sensors and devices. The API also provides access to essential shared services provided by the SmartServer IoT including scheduling, logging and alarming.

Features and Benefits

- Modern MQTT and REST web-services interfaces based on IoT Access Protocol (IAP)
- Supports BACnet and OPC UA clients
- Interfaces for Industrial IoT device protocols including LON, BACnet, Modbus and IAP
- Built-in device management with local controls services for scheduling, logging and alarming
- Integrated browser-based CMS for defining, commissioning and managing devices
- Drag and drop programming tools for simplifying creation of controls sequences and custom visualization
- Integrated LON RNIs, LON routers, and BACnet routers supporting LON IP-852, LON FT, BACnet FT and LON TP-1250 interface modules with multi-channel support
- Supports custom applications and drivers
- Compatible with IzoT™ Net and LNS tools

PRODUCT SPECIFICATIONS

Hardware and electrical specifications

Processor:	800 MHz ARM Cortex A9
Operating system:	Linux
Security:	TLS with AES 128-bit encryption
Clock:	Internal, real time
Built-in memory:	2 GB DDR3L SDRAM 8 GB eMMC flash memory
Memory expansion:	32GB Micro SD card (included)
Device support:	Up to 1,000 devices; 20,000 datapoints
Input voltage:	10.5-30VDC, 10W or isolated 12-30VAC, 12VA, 50/60Hz
Temperature range:	-40°C to +65°C
Surge protection:	EN 61000-4-5:2006, +/- 4KV
Form factor:	DIN 43880 8TE

Wired interfaces

Gigabit Ethernet:	2 RJ-45 jacks for WAN and LAN, including LON IP-70 and IP-852, BACnet/IP and Modbus TCP
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RS-485:	2 4-pin terminal blocks for Modbus RTU and other RS-485 communication (Pro EX model only)
Type A USB 2.0:	4 ports for local IoT network and I/O interfaces
Micro-B USB:	1 console port

External interface support

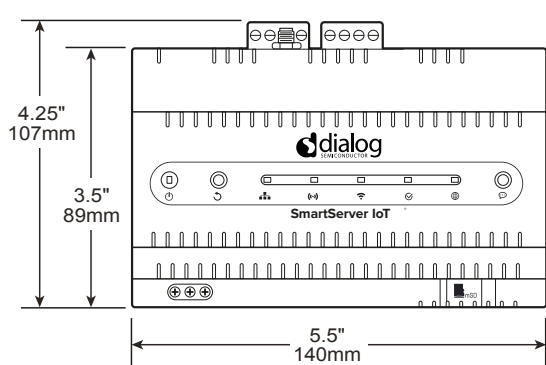
Supports up to 4 optional external interfaces, sold separately:

- 75060R-30 U60 TP-1250 DIN USB Network Interface
- 75060R-40 U60 FT DIN USB Network Interface
- 75070R-70 U70 PL-20 DIN USB Network Interface
- 41700-100 and 41700-110 IOX Expansion Modules

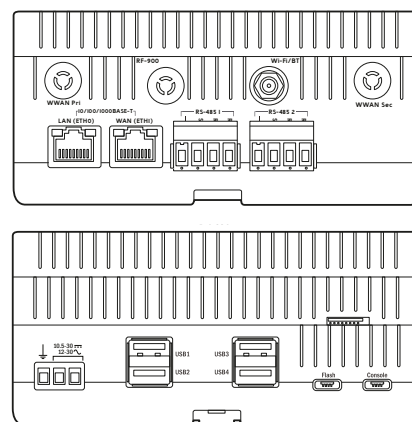
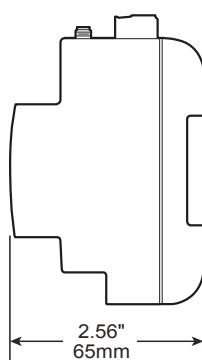
Safety, compliance and warranty

Agency approvals:	CE, IC, and CCC
EMC:	FCC Part 15 Class B, EN55022 Class B, EN55024, CISPR 24 Class B, CISPR 32 Class B, VCCI Class B
Warranty:	1 year limited warranty

DIMENSIONS, MOUNTING AND CONNECTIONS



Front view when mounted to DIN rail



Top view: Ethernet jacks, RS-485 terminals and coax antenna connector (RS-485 and Wi-Fi only available on the Pro EX model)

Bottom view: Power input terminals, USB ports, and console interface

Model #	Product Name	Product Description
72201R-240	SmartServer IoT Pro	IoT platform with USB expansion
72201R-248	SmartServer IoT Pro EX	IoT platform with USB and RS-485 expansion
72220-XXXX	Device Capacity Key	Unlocks additional device support for a SmartServer IoT (XXXX=30, 100, 300 or 1000)
92201R-240	Pro Model Maintenance	One year of software updates for a SmartServer IoT Pro
92201R-248	Pro EX Model Maintenance	One year of software updates for a SmartServer IoT Pro Ex
72220-240-P	Add on Bundle for Pro Model	Unlimited capacity and 2 year additional maintenance (limited time offer)
72220-248-P	Add on Bundle for Pro EX Model	Unlimited capacity and 2 year additional maintenance (limited time offer)

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