ELECTRIFICATION CANADA

Edge Industrial Gateway

IoT Gateway - Local and Cloud

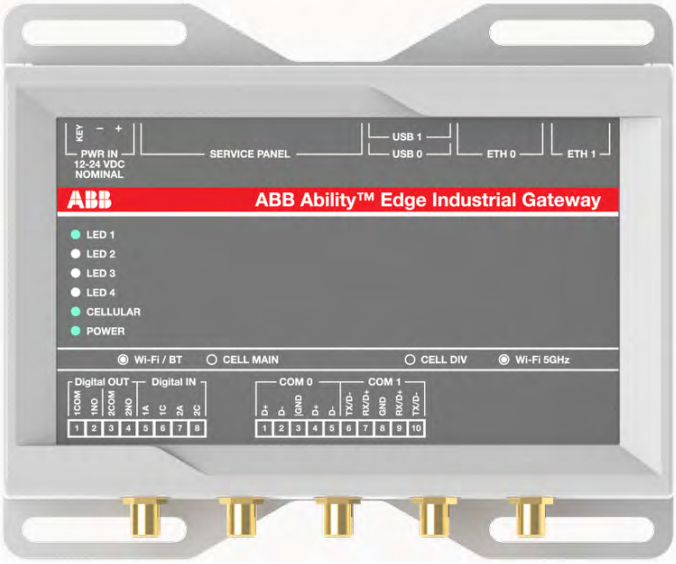
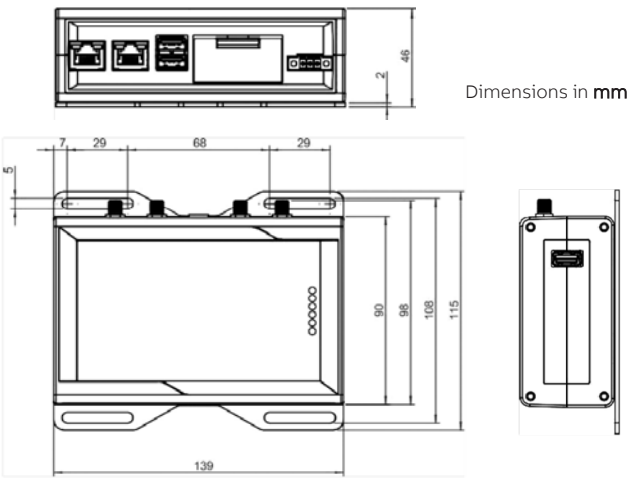


ABB Edge Industrial Gateway (**EIG**) is an independent gateway that gathers data from multiple field devices for monitoring and visualization of energy and assets either locally (on-premise) and/or in the cloud, that is on Ability™ Energy and Asset Manager (**EAM**) platform. All ABB Ability™ solutions offer simple, safe, secure and scalable implementation with clear ROI.

Where and why:

- EIG is a data concentrator, server and gateway with GSM modem, all of it in one compact, DIN-rail mounted device
- EIG Local version gathers data from downstream devices for on-premise visualization on a PC or similar device
- EIG Cloud version sends the data via in-built modem to ABB Ability™ Energy and Asset Manager (**EAM**) cloud platform for visualization via web-app on multiple devices
- Up to 60 downstream devices (45 on Modbus TCP/IP + 15 on RTU) can be connected to a single EIG device
- Compatible ABB devices include EkipUP, Emax2, TmaxXT, Swicom, Relion, CMS-700, TVOC2 (ArcGuard) and more, as well as select 3rd party (non-ABB) devices.



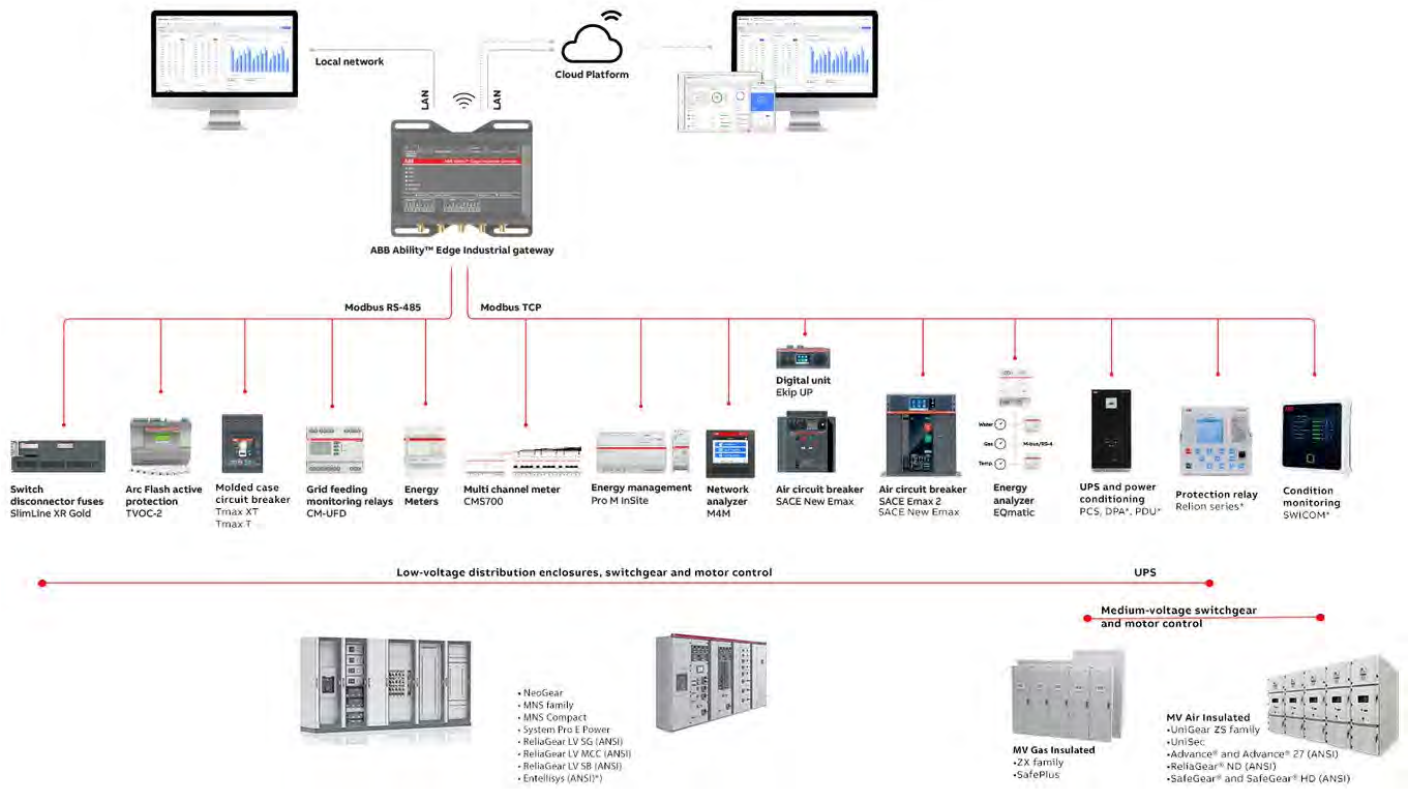
Dimensions in **mm**

Fast facts:

- Local version offers "on-prem" visualization
- Cloud version directly links to Ability™ EAM
- Inbuilt Wi-Fi 2.4/5 GHz (antenna extra)
- Ethernet ports (RJ45) for connection to existing IT infrastructure
- Inbuilt MicroSIM card slot (GSM 3G/4G) for direct and secure cloud connection without disturbing existing IT setup
- Inbuilt memory 1.7GB, plus additional backup (up to 32GB, not included) via USB 2.0 port
- Optional side mounted expansion module
- Multiple communication ports standard
- Standard DIN-rail mounting
- Approvals: UL, FCC, IC
- Fast and simple startup with intuitive provisioning tool, freely downloadable

Tools, resources and weblinks:

- Short intro video on EIG
- Ability™ ROI calculator online
- EIG user manual
- EIG installation instructions
- EAM provisioning manual
- EIG webpage
- EIG "How to" video series
- Ability™ EAM webpage



Benefits of digital connectivity and relevance of EAM

Ability™ EAM keeps the solution simple at all levels, which translates to fast, safe and secure implementation with rapid scalability and overall ease of use. This focus on simplicity means an end-user can independently setup and startup the units and system in an hour or less. Over 71 pre-configured widgets (list attached) on EAM platform immediately map and display measured data in tabular and visual formats. More importantly, it removes the need for creating graphics, tags, etc.

Additional devices (EkipUP, Emax2, TmaxXT, CMS-700, Swicom, etc.) can be introduced to the same subscription account at any point in future, with the same level of ease.

It is important to note here that the end-user (subscriber) owns the solution as well as the data. Cybersecurity is integral to product design and system architecture at all levels. Please click here for more info.

Part numbers listed below for reference, can be ordered from your local distributor.

Product Code	Parts description
1SDA115508R1	ABB Ability Hybrid Industrial gateway - Local View
1SDA116751R1	ABB Ability Edge Industrial Gateway wifi
1SDA116753R1	ABB Ability Edge Industrial Gateway 3G US
1SDA114038R1	I/O additional side module for EIG
1SDA114039R1	Wi-fi/Bluetooth antenna EIG
1SDA114040R1	Cellular antenna EIG
1SDA114041R1	Wall Mounting metal brackets for EIG
1SDA114043R1	EIG Power Supply 115-230Vac/24Vdc, 5 feet cable

Technical specifications and details by version			
Version	EIG Local NAM	EIG 3G NAM	EIG 3G EU
Processor	TI AM3352, 1 GHz, 1 Core		
Memory	1.7 GB DDRC		
Storage	8GB eMMC		
Wired interfaces	2x Fast Ethernet RJ45 3x USB 2.0 (noise/surge protected) TypeA 1x RS232 1x RS485 Com0		
Wireless interfaces	No modem	LTE Cat 1 (NA) 3G Fallback	LTE Cat 1 (EU) 3G Fallback
WiFi/Bluetooth	802.11a,b,g,n / BLE 4.2		
Antennae (extra)	2x RP-SMA WiFi/Bluetooth	2x SMA Cellular 2x RP-SMA Wi-Fi/Bluetooth	
Onboard I/O (**disabled**)	2x digital inputs (36V, 1kV optoinsulated) 2x digital output (40V ac/dc, 1kV optoinsulated, 500mA, 1kHz max switching)		
Optional side-expansion I/O module	6x digital inputs (24Vdc) 2x 4-20mA analog input 2x 0-36V analog input		
Internal hardware	RTC with supercap backup System level watchdog TPM 2.0 Internal temperature sensor 1x Reset button 1x factory reset button		
LED indicators	1x Power 1x Cellular connection 4x Status indications		
SIM card holder	MicroSIM (in NAM and EU version only)		
Approvals	UL, FCC (US), ISED (Canada)		CE, 2014/53
Input voltage	9-36Vdc with transient protection		
Power consumption	4W nominal; 15W maximum		
Temperature ranges	Operating -40°C to +70°C Storage -40°C to +85°C		
Humidity range	5-95% (non-condensing) at 40°C		

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