

# **ABB Ability™ explained**

### What is ABB Ability™?

- Cloud-native digital connectivity platform from ABB
- > Technology enabler for energy **and** cost efficiency, sustainability, carbon footprint reduction, plant and personnel safety ... at end-use
- > Simple but effective device-to-cloud concept, leveraging ABB's codified domain expertise and AI
- Drives tangible savings in operating costs direct and indirect

**Note**: our online **ROI calculator** is a useful tool to estimate approximate savings potential at end use.

### What is ABB Ability™ Energy and Asset Manager?

- ➤ ABB Ability<sup>™</sup> Energy Manager and Asset Manager are cloud-based SaaS platforms (Software as a Service) available as annual subscriptions that can also be bundled together
- > Data repository with pre-configured widgets for dashboard visualization of energy consumption and forecasting, power quality, asset health monitoring, predictive maintenance, etc.
- Connects easily to site-installed hardware like circuit breakers (<u>Emax2</u>, <u>TmaxXT</u>) and digital devices (<u>EkipUP+</u>, <u>Edge Gateway</u>, <u>CMS-700</u>, <u>Swicom</u>) ... and <u>E-kit</u> for non-ABB 3<sup>rd</sup> party devices.

### How does Ability™ work?

- > Secure device-to-cloud connectivity from one or more locations with data presented on preconfigured, user selectable dashboards online
- Focus on **simplicity** = no programming, no graphics development, no tags, no coding
- Intended for use by multiple functions in any organization to monitor/manage energy and assets
- > Safe, simple, scalable, secure, and economical digital upgrade of existing installations (brownfield retrofits) with little to no disruption on site
- > Integrates into new equipment (greenfield) as embedded technology

#### What value-add does Ability™ bring?

- > Operating cost savings through energy/asset management, predictive maintenance, etc.
- > Platform value by way of consolidating a spectrum of plant data into one cloud location
- > Aligned with ISO50001, LEED, BREEAM and IEC60364-8-1 to track and improve energy efficiency
- Local device-based functions include advanced protection, load management, ATS, etc.
- > Focus is on simplicity and safety and cost saving in implementation and operation
- Key value-add by stakeholder is summarized below:

Stakeholder	Ability™ value-add
Engineer	System concept and architecture facilitates faster design and specifications,
Consultant	component selection with clear value demonstration.
Integrator	Architecture comprises pre-configured web-app and automatic device
Contractor	mapping to drastically reduce wiring and equipment footprint.
Energy manager	Simple installation with cost savings and safe implementation.
Owner	Simple solution offers end-user full visibility and ownership of their
End-user	plant/process/assets. Focus on OPEX rather than CAPEX simplifies decision-
	making. Cost savings, sustainability and carbon footprint reduction through
	process and energy efficiency.



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## ABB Ability<sup>™</sup> explained

## Where does Ability™ exist?

- ➤ ABB Ability<sup>™</sup> exists in the Microsoft Azure® environment
- Leveraging the close partnership between ABB and Microsoft® towards sustainability

### How secure is Ability™?

- Secure by design with a strong 360° approach to cybersecurity by ABB and Microsoft®
- Multi-level encryption, whitelisting and credential verification, with regular updates, etc.
- > Important: cybersecurity is never a final solution but a rapidly moving target in a dynamic landscape. Threat mitigation is a continuous effort (individual and collective) at every stage of development and every level in an organization, to address intentional threats, inadvertent lapses, and vulnerabilities, effectively and proactively, to the extent possible.
- For more information, please read our whitepapers on cybersecurity:
  ABB-MSFT-NXP Cybersecurity Whitepaper 2021.pdf (microsoft.com)
  Protecting-data-unsurpassed-industrial-cybersecurity 2020 (abb.com)

## How is Ability™ sold in Canada?

- > Hardware and accessories/firmware sold through standard sales/distribution channels as loose components and/or packaged solutions based on customer need and application
- Selection tools and configuration software downloadable free of charge (reusable programming cable is a one-time purchase)
- ➤ Energy Manager offered as an annual subscription directly online at ABB Marketplace™

### Weblinks for more information:

- Ability™ Canada (also in French), please use the chatbot therein, to delve deeper
- Ability™ Energy Manager and Asset Manager
- Short intro videos → Energy Manager, Asset Manager, EkipUP+, Edge Gateway
- ... or simply email us at <u>ability@ca.abb.com</u>

