

MEASUREMENT & ANALYTICS | DATASHEET | DS/SMART_DEVICE_MANAGER-EN REV B

ABB Ability™

Smart Device Manager 3.0



Measurement made easy

The ABB Ability™ Smart Device Manager 3.0 is the next generation Handheld Configurator with FDI based device management and is equipped with a high-performance rugged tablet with innovative graphical user interface that helps field engineers to effectively work with the process instrumentation.

ABB Ability™ Smart Device Manager 3.0 initiates a paradigm change for configuration and parametrization of Field devices. Innovative and intuitive navigation and an adaptive user interface. This makes configuration, commissioning, diagnostics and maintenance of field instrumentation faster and easier than ever before.

- Fully Rugged Next Generation Tablet with 10.1" Full HD Display, making it ideal for field workforce and sets a benchmark for general and hazardous environment.
- The flexible configuration port gives business users the legacy port options they require in a compact mode.
- Never-before has so much capability, flexibility and performance been packed into such a small form factor with premium outdoor viewing quality and lightweight design
- Comprehensive package of Cyber secured tablet PC and Futureproof software in the market – Ready-to-use
- Meets General Purpose and Hazardous area requirements with certifications.
- Works with FDI as well as legacy DDs - one tool for all device applications
- Quick to start - scans, identifications & enables access to device within 3 mins
- Preloaded universal makes DD packages – Ready to use.
- Includes NAMUR NE 107 instrument diagnosis view
- Intuitive innovative software for the field providing the best-in-class field experience
- The UI supports multiple device views allowing the user to switch the view of the devices in a simple manner and manage multiple devices in a more efficient manner
- Leverages FDI technology, which combines the simplicity of EDD and information richness of DTM
- Supports Configuration Management by exporting device configuration for documentation in PDF files
- Connects to Online drivers' repository – eliminates the trial & error search of Device drivers
- One hardware for all ABB Ability™ Digital Solutions, you can additionally opt for our digital offering such as ABB Ability™ Verification for measurement devices, My Measurement Assistant, ABB Ability™ SmartMaster
- Seamless remote support for any device configuration/diagnostics.

General Purpose Handheld Configurator

STANDARD

- Fully Rugged Tablet 10.1inch FHD Lumibond® display with Getac sunlight readable technology (1,000 nits) and capacitive touchscreen.
- MIL-STD-810H, MIL-STD-461G & IP 66 certified
- Rugged body with 6ft (1.8m) drop resistant.
- 10.1" Wide Viewing Angle TFT LCD WUXGA (1920 x 1200) Protection film
- Intel Core i5-1235U 12th Generation Processor, Max. 4.4 GHz with Intel Turbo Boost Technology
- Versatile I/Os connectivity including Thunderbolt™ 4.
- Enhanced Wi-Fi, GPS and LTE performance.
- Windows 10 Pro 64-bit
- 8GB RAM, 256GB Solid State Drives
- Wi-Fi 6E AX211, 802.11ax, WLAN, Bluetooth® v5.3
- Normal operation up to 8 hours and 10 hours for extended usage.
- Lightweight design - approx 1.2kg
- User exchangeable battery



Hazardous area Handheld Configurator | Standard

- Intrinsically Safe Tablet is positioned to be the most advanced, efficient, and rugged Windows tablet,
- Engineered with faster wireless services, enhanced memory, and expanded storage. Operating in the most hazardous industries with explosive environments.
- Windows 11 Pro 64-bit
- 10.1 in / 25.6 cm AHVA display WQXGA (2560 x 1600 px) Contrast 1000:1 (min.: 800:1), Brightness 540 NITS, Viewing angle (up/down, left/right) 170°, 16.7M colors
- Intel® Quad-Core Apollo Lake processor
- Base: 1.6GHz, Burst 1.8GHz
- 8GB RAM, 256GB Storage
- Wi-Fi 802.11 a/b/g/n/ac, Bluetooth 5.2 + HS
- Normal operation up to 6 hours and 8 hours for extended usage.
- Lightweight design - approx 1.4kg



Functional Features:**Hand-held configuration**

- ABB Ability™ Field Information Manager (FIM) V3.1.1 innovative high-performance graphical user interface allows the user to easily access all open devices.
- Intuitive User Interface for efficient device management
- Device Representation via Device Tiles for quick information and access
- Topology and Configurations View for easy navigation through topology, devices, and datasets
- Upload and download of datasets to allow working with Offline Configurations
- Intelligent Device Package handling with automatic assignment and options for manual replacement
- Device Views for efficient working with device data and switching between multiple devices.
- Templates for pre-configuration of datasets before devices are available.
- Import of Engineering Data for comparison against field device data
- Intelligent Device Package handling with automatic assignment and options for manual replacement
- Common Names for assignment of external generic names to specific internal Device Package items
- Enhanced Touch Mode, Tooltip Picker (for use with touchscreen devices), Easy Access Wizard, Common Names Sidebar and Help
- Save the configuration – you can use the same to multiple devices
- Wide range of Field protocols support

Power-Loop for Bench-Top Testing

ABB Ability™ Smart Device Manager has an optional offering “Power-Loop”. It is an in-built functionality to power a device over a Power-express modem.

It is as simple as connecting the SDM with Power-express modem to any two-wire field instrument to power it.

Eliminates the need for external power supplies, allowing seamless device configuration during project commissioning even in the absence of main power. This streamlines workflows and drives greater efficiency across project execution.

Bluetooth connectivity

ABB Ability™ Smart Device Manager has an optional offering “Bluetooth HART Modems”. It delivers seamless, wireless communication for HART-enabled field devices. With secure Bluetooth connectivity, it eliminates cables, accelerates commissioning, and simplifies maintenance - giving engineers instant access to device diagnostics and configuration even in congested panels, hazardous zones, or hard-to-reach locations.

Compact, reliable, and easy to use, it's the modern tool for smarter, faster, and safer field operations.

Hand-held verification:

- ABB Ability™ Verification for measurement devices – Universal tool for field device verification.
- Pre-installed SRV500 Verification Software with trial credits
- Intuitive, simple user interface
- Multi-protocol support: HART, InfraRed, NFC
- One software package verifies multiple device types.
- Verify devices to design parameters.
- Enables predictive maintenance via condition monitoring.
- 4x faster than manual verifications tests.
- Meets ISO requirements for field instrumentation devices calibration/ verification record.

Note: The verification program supports general purpose only, not hazardous area.

Cyber Security:

Meets ABB's Minimum cyber security requirements (MCSR 2.0):

Implementation

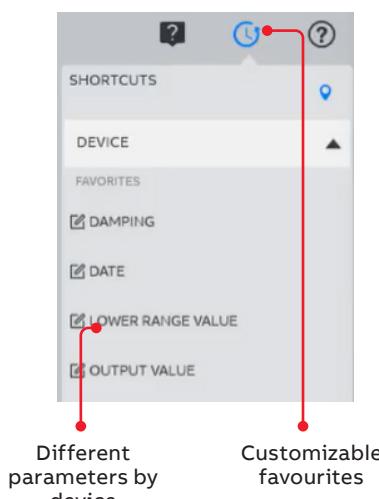
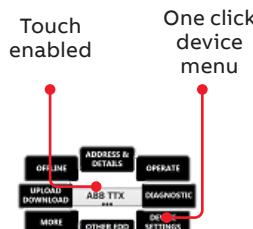
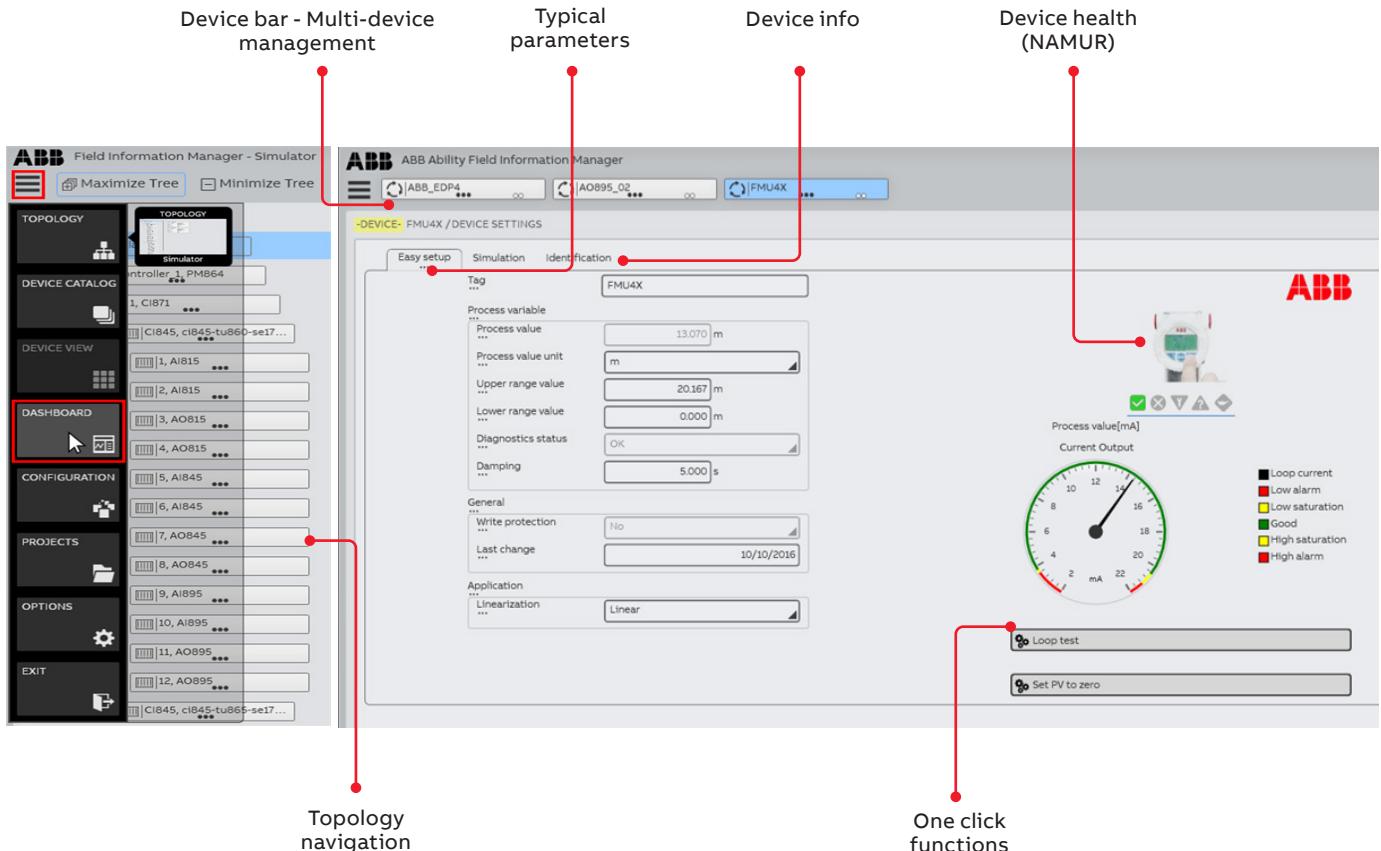
- Removal of backdoors
- Confirm quality of crypto and security functionality
- Hardening

Processes

- Vulnerability handling
- Patch management

Verification

- Security assessment
- Robustness testing
- Malware prevention

Hand-Held Configuration:**Easy navigation**

General Purpose Hand-Held Configurator:

Specifications	General purpose
Make & Model Number	Getac, UX10, G3
License	Field Information Manager 3.1.1 Handheld Edition
No. of Tags	100 Tags Add-on option available if needed
Device Drivers Repository	ABB Repository support Field COMM Group (FCG) Repository Support Access to all Third-Party device drivers Offline Repository uses repositories for offline environments
Connectivity	HART Protocol supports versions 5,6 and 7 Supported Baud rates 1200, 9600, 19200, 38400, 115200 HART-IP, Wireless-HART, OPC_UA PROFIBUS, Profinet
Bluetooth connectivity	Yes, Supported MACTek Bluetooth HART Modem (Add-on option available)
Power-Loop	Yes, Supported Power inbuilt modem (Add-on option available)
Benefits	Offline Device configuration Import/Export Device configuration as a file Individual and bulk handling of datasets of smart field devices Live Comparison between Offline dataset and Online devices Universal makes DD packages are pre-loaded Multi-protocol Support
Beyond Configuration	Remote Assistance enabled Latest OS, Cyber Security enabled Integrated Personnel Service Assistant (MMA) Capable of calibration verification
Supported HART modems	Thorsis isHRT USB Thorsis H@RT BluePack MACTek USB HART modem MACTek Bluetooth HART modem Power Express HM-MT-USB-PWRX-010031P Procomsol HART Modem
Supported PROFIBUS modems	Thorsis isPro USBx12 Thorsis isPro USBv4
Mobile computing platform	Intel Core i5-1235U 12th Generation Processor Max. 4.4 GHz with Intel Turbo Boost Technology
Operating System	Windows 11 (Latest Windows OS)
RAM and Storage	8GB RAM and 256GB SSD
Camera	FHD Webcam and Rear: 8MP with Autofocus and LED light
LCD	10.1" Wide Viewing Angle TFT LCD WUXGA (1920 x 1200) Protection film 1,000 nits LumiBond display with Getac sunlight readable technology
Touchscreen	Capacitive multi-touch screen
Bluetooth	Version 5.3
WLAN	Intel Wi-Fi 6E AX211, 802.11ax
LAN	1000BASE-T / 100BASE-TX / 10 Base-T USB 3.2 Gen 2 Type-A x1 Thunderbolt 4 Type-C x1 LAN Connector: RJ45
Interface	Docking Station Connection x1 Audio out x1
Power	AC Adapter Input: 100V - 240V AC, 50Hz/60Hz, Battery: Li-Ion (11.1V, 4200mAh)
Security features	TPM 2.0 (Trusted Platform Module), Kensington lock
Physical dimensions (W x D x H)	279mm x 194.5mm x 23.5mm (10.98in x 7.65in x 0.92in)
Weight	Approx 1.2kg (Approx 2.68lbs)
Operating temperature	-29°C to 63°C (-20°F to 145°F)
Storage temperature	-51°C to 71°C (-60°F to 160°F)
Testing standards	Water & Dust resistance test: IP-66 Vibration and Gravity drop resistance test: 1.8m

Hazardous area Hand-held Configurator:

Specifications	Hazardous Area, Zone-1 Certified
Make & Model Number	Aegex, 100M™
License	Field Information Manager 3.1.1 - Handheld Edition
No. of Tags	100 Tags Add-on option available if needed
Device Drivers Repository	ABB Repository support Field COMM Group (FCG) Repository Support Access to all Third-Party device drivers Offline Repository uses repositories for offline environments
Connectivity	HART Protocol supports versions 5,6 and 7 Supported Baud rates 1200, 9600, 19200, 38400, 115200
Benefits	Offline Device configuration Import/Export Device configuration as a file Individual and bulk handling of datasets of smart field devices. Live Comparison between Offline dataset and Online devices Multipurpose Platform Universal makes DD packages are pre-loaded
Beyond Configuration	Remote Assistance enabled Latest OS, Cyber Security enabled Integrated Personnel Service Assistant (MMA)
Supported HART modems	Pepperl & Fuchs HM-PF-BT-EX-010041
Mobile computing platform	Intel® Quad-Core Apollo Lake processor Base: 1.6GHz, Burst 1.8GHz
Operating System	Windows 11 (Latest Windows OS)
RAM and Storage	8GB RAM and 256GB Storage
Camera	FHD Webcam and Rear: 8MP with Autofocus and LED light
Display	10.1" / 25.6 cm AHVA display WQXGA (2560 x 1600 px) Contrast 1000:1 (min.: 800:1) Brightness 540 NITs Viewing angle (up/down, left/right) 170° 16.7M colors
Bluetooth	Bluetooth 5.2 + HS
WLAN	Wi-Fi 802.11 a/b/g/n/ac
Interface	Magnetic pin connector for USB 2.0 Magnetic pin connector for rapid charging with Aegex Wall Charger
Power	AC Adapter Input: 100V - 240V AC, 50Hz/60Hz, 7.2V 2 x 3420mAh, 49.68Wh Rechargeable Lithium Ion Charging time: Wall adaptor: 0-90% in 2.5 hours to 100% in approx. 3.5 hours
Security features	Intel® TXE Boot Guard 2.0 FW TPM (Intel® PTT3) Intel® Trusted Execution Engine Interface (Intel® TXEI) Driver Intel AES New Instructions BitLocker
Physical dimensions (W x D x H)	W x H x D: 278 x 207 x 13.8 mm (10.94 x 8.15 x 0.54 in) - without battery W x H x D: 278 x 207 x 28.3 mm (10.94 x 8.15 x 1.11 in) - at battery section
Weight	Approx :1.4Kg (3.15 lbs)
Operating temperature	-10°C to 50°C (14°F to 122°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
IP Rating	Water & Dust resistance test: IP-67
Certifications	UL 913 8th Edition, CSA C22.2 No. 60079-0 & -11 Class I, II, III, Division 1, Groups A-G, T4 Tamb = -20°C...+55°C, IP67 IECEx Ex ia IIC T4 Ga Ex ia IIIC T135°C Da Tamb = -20°C...+55°C, IP67 ATEX II 2G Ex ia IIC T4 Ga Ex ia IIIC T135°C Da Tamb = -20°C...+55°C, IP67

Ordering information

Main order number	1 to 3	4	5	6	7	8	9	10	11	Options
ABB Ability™ Smart Device Manager 3.0	SDM									
Variants										
FIM Software only		A								
General Purpose Hand-held Configurator		B								
Hazardous Area (Zone-1) Hand-held Configurator		C								
Optional Modems										
Not Required		A								
P&F Bluetooth Modem		C								
P&F Power-Loop Modem		D								
ABB Ability™ SRV500 Standard Verification Annual license										
Not Required		0								
Required		1								
Reserved										
Documentation language: English										M5

Model Code	Description
SDM.A.Y0.Y0.Y0.Y0.Y0.Y0.Y.M5	FIM Software only
SDM.B.A.0.Y0.Y0.Y0.Y0.Y.M5	General Purpose Configurator
SDM.B.C.0.Y0.Y0.Y0.Y0.Y.M5	General Purpose Configurator with Bluetooth HART modem
SDM.B.D.0.Y0.Y0.Y0.Y0.Y.M5	General Purpose Configurator with Power-Loop HART modem
SDM.B.A.1.Y0.Y0.Y0.Y0.Y.M5	General Purpose Configurator with Verification License
SDM.C.Y0.Y0.Y0.Y0.Y0.Y0.Y.M5	Hazardous Area Purpose (Zone-1) Handheld Configurator

Included in the Configurator package:

Item	General Purpose configurator	Hazardous area configurator
Tablet Hardware	Yes	Yes
FIM with license pre-installed	Yes	Yes
Hand Strap	Yes	Yes
250 Ohms Loop resistor	Yes	Yes
Carry Bag	Yes	Yes
HART Modem	Yes	Yes

Optional (only if ordered)

SRV500 verification	Yes	No
Power-Loop Modem (General Purpose)	Yes	No
Bluetooth Modem (General Purpose)	Yes	No

Notes

Contacts

To find your local ABB contact visit:

abb.com/contacts

For more product information visit:

abb.com/measurement

For more information: [Smart Device Manager](#)



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