

ABB Ability™ Smart Device Manager

Device management made easy



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

01 Device management made easy

ABB's Smart Device Manager initiates a paradigm change for configuration and parametrization of Fieldbus 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 external 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 both General Purpose & Hazardous area requirements.
- Works with FDI as well as legacy DDs - one tool for all device applications
- Quick to start - scans, identifies & enables access to device within 3 mins
- 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 | Entry Level

- 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
- Battery operation for up to eight hours
- Lightweight design - approx 1,2kg
- User exchangeable battery



General Purpose Handheld Configurator | Premium

- Rugged Tablet 10.1inch WUXGA 1920 x 1200 LED-backlit screen with 10-point capacitive multi-touch + digitiser electronic stylus pen; anti-reflective and anti-glare screen treatments
- Engineered to withstand drips, drops, dust and grime TOUGHBOOK® computers thrive and survive in the hardest of environments
- Windows 10 Pro 64-bit
- Semi-rugged body with multiple 1.2 m drops to concrete and IP65 sealing providing protection from dust and water splashes
- Intel® Core™ i5-3437U vPro™ Processor 1.9GHz with Turbo Boost up to 2.9 GHz
- 8GB RAM, 256GB Solid State Drives
- 802.11 abgn WLAN, Bluetooth® v4.0 + EDR
- Battery operation for up to eight hours
- Lightweight design - approx 1,1kg
- User exchangeable battery



Functional Features:

Hand-held configuration

- ABB's Field Information Manager (FIM) V3.0- innovative high-performance graphical user interface allows the user to easily access all open devices.
- Leverages FDI technology, which combines the simplicity of EDD and information richness of DTM
- 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

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.

Cyber Security:

Meets ABB's Minimum cyber security requirements:

Implementation

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

Processes

- Vulnerability handling
- Patch management

Verification

- Security assessment
- Robustness testing
- Malware prevention

Easy navigation

The screenshot displays the ABB Field Information Manager (FIM) V3.0 interface, which is divided into several functional areas. Red lines and labels point to specific features:

- Device bar - Multi-device management:** Located on the left side, it contains a vertical list of device tiles, each representing a different device in the system.
- Topology navigation:** A button labeled 'TOPOLOGY' is located at the top left of the device bar.
- Typical parameters:** The main central area displays various parameters for the selected device (FMU4X), including process value, process value unit, upper range value, lower range value, diagnostics status, and damping.
- Device info:** A section on the right side of the main area provides additional information about the device, such as its tag, simulation status, and identification.
- Device health (NAMUR):** A circular gauge on the right side of the main area indicates the device's health status, with a legend for loop current, low alarm, low saturation, good, high saturation, and high alarm.
- One click functions:** A section at the bottom of the main area contains buttons for 'Loop test' and 'Set PV to zero'.
- Touch enabled:** A button labeled 'TOUCH' is located at the top right of the device bar.
- One click device menu:** A button labeled 'ONE CLICK' is located at the top right of the main area.
- Different parameters by device:** A section on the right side of the main area displays a list of parameters for the selected device, with checkboxes for 'DAMPING', 'DATE', 'LOWER RANGE VALUE', and 'OUTPUT VALUE'.
- Customizable favourites:** A section at the bottom right of the main area contains a list of favorite parameters, with checkboxes for 'DAMPING', 'DATE', 'LOWER RANGE VALUE', and 'OUTPUT VALUE'.

General Purpose Handheld Configurator - Specifications Entry level	
Make & Model Number	Getac, UX10, G3
License	Field Information Manager 3.0- Handheld Edition
No. of Tags	100 Tags Add-on option available if needed
Device Drivers Repository	ABB Repository support
	FieldComm Group (FCG) Repository Support Access to all Third-Party device drivers
	Offline Repository use repositories for offline environments
Connectivity	HART Protocol supports version 5,6 and 7
	Supported Baud rates 1200, 9600, 19200, 38400, 115200
	Wireless-HART, HART-IP, Bluetooth over HART, IR over HART, Serial, OPC-UA, PROFIBUS / Profinet
Benefits	Offline Device configuration
	Import/Export Device configuration as a file
Supported HART modems	ABB NDA121-NX USB (Ex ia)
	ABB NHA121-NO USB
	Thorsis isHRT USB
	Thorsis H@RT BluePack
	MACTek USB HART modem
	MACTek Bluetooth HART modem
Supported PROFIBUS modems	Thorsis isPro USBx12
	Thorsis isPro USBv4
Mobile computing platform	Intel Corei5-6300U vPro processor
	(2.4GHz, 3MB Intel Smart Cache)
Operating System	Windows 10 Pro
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
Interface	USB 3.2 Gen 2 Type-A x1
	Thunderbolt 4 Type-C x1
	LAN Connector: RJ45
	Docking Station Connection x1
	Headset x1
Power	Docking Connector
	AC Adapter Input: 100V - 240V AC, 50Hz/60Hz
	Battery: Li-Ion (11.1V, 4200mAh)
	Operating time: 3-4 hours depends on usage
Security features	TPM 2.0 (Trusted Platform Module), Kensington lock
Physical dimensions (W x D x H)	279mm x 194.5mm x 23.5mm (10.98" x 7.65" x 0.92")
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

General Purpose Handheld Configurator - Specifications Premium	
Make & Model Number	Panasonic, FZ-G2
License	Field Information Manager 3.0- Handheld Edition
No. of Tags	100 Tags Add-on option available if needed
Device Drivers Repository	ABB Repository support
	FieldComm Group (FCG) Repository Support Access to all Third-Party device drivers
	Offline Repository use repositories for offline environments
Connectivity	HART Protocol supports version 5,6 and 7
	Supported Baud rates 1200, 9600, 19200, 38400, 115200
	Wireless-HART, HART-IP, Bluetooth over HART, IR over HART, Serial, OPC-UA, PROFIBUS / Profinet
Benefits	Offline Device configuration
	Import/Export Device configuration as a file
Supported HART modems	ABB NDA121-NX USB (Ex ia)
	ABB NHA121-NO USB
	Thorsis isHRT USB
	Thorsis H@RT BluePack
	MACTek USB HART modem
	MACTek Bluetooth HART modem
Supported PROFIBUS modems	Thorsis isPro USBx12
	Thorsis isPro USBv4
Mobile computing platform	Intel Corei5-6300U vPro processor
	(2.4GHz, 3MB Intel Smart Cache)
Operating System	Windows 10 Pro
RAM and Storage	8GB RAM and 256GB SSD
Camera	Rear: 8MP with Autofocus and LED light
LCD	10.1" sunlight-viewable WUXGA Active Matrix (TFT) IPS a colour LCD (up to 800cd/m2 brightness)
Touchscreen	10 finger captive multi-touchscreen
Bluetooth	Version 4.1 + EDR Class 1
WLAN	Intel Dual Band Wireless-AC 8260
LAN	1000BASE-T / 100BASE-TX / 10 Base-T
Interface	USB 3.0 x1
	LAN Connector: RJ45
	Serial (16550A compatible)
	HDMI x1
	Headset x1
	Port replicator connector 24-pin
Power	AC Adapter Input: 100V - 240V AC, 50Hz/60Hz, Output: 16V DC, 4.06A
	Battery: Li-Ion (11.1V, 4200mAh)
	Operating time: 3-4 hours, MobileMarkTM 2014 2014
Security features	TPM (Trusted Platform Module, TCG V1.2 compliant) Integrated hardware security lock slot, password security (supervisor password, user password, HDD lock)
Physical dimensions (W x D x H)	270mm x 188mm x 19mm (10.6" x 7.4" x 0.75")
Weight	Approx 1.1kg (Approx 2.43lbs)
Operating temperature	-10'c to 50'c (14'f to 122'f)
Storage temperature	-20'c to 60'c (-4'f to 140'f)
Testing standards	Water & Dust resistance test: IP-65
	Gravity drop resistance test: 180cm

Ordering information

Main order number	1 to 3	4	5	6	7	8	9	10	11	12	13	Options
ABB Smart Device Manager	SDM											
Variants												
Smart Device Manager - SDM Software only		A										
Smart Device Manager - General Purpose Configurator		B										
Hardware variants												
Entry-Level (Getac Make) Hand-held configurator			A									
Standard (Panasonic Make) Hand-held configurator			B									
ABB Ability Standard Verification Annual license												
Required				1								
Not Required				0								
Reserved						Y	O	Y	O	Y	O	Y
Documentation language: English												M5

Model Code	Description
SDM.A.Y0.Y0.Y0.Y0.Y0.Y.M5	ABB Ability Smart Device Manager - SDM 2.0 Software only
SDM.B.A.0.Y0.Y0.Y0.Y0.Y.M5	ABB Ability Smart Device Manager 2.0 - General Purpose Entry-Level Configurator
SDM.B.A.1.Y0.Y0.Y0.Y0.Y.M5	ABB Ability Smart Device Manager 2.0 - General Purpose Entry-Level Configurator with Verification License
SDM.B.B.0.Y0.Y0.Y0.Y0.Y.M5	ABB Ability Smart Device Manager 2.0 - General Purpose Premium Configurator
SDM.B.B.1.Y0.Y0.Y0.Y0.Y.M5	ABB Ability Smart Device Manager 2.0 - General Purpose Premium Configurator with Verification License

Contacts

To find your local ABB contact visit:

abb.com/contacts

For more product information visit:

abb.com/measurement

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