

Schneider Electric Altivar Machine ATV340 DTM Library V3.2.3

- Release Notes -

This document contains important information about the Altivar Machine ATV340 DTM Library software component and Release Content.

1. Package Content

Software Component Name	Version
Altivar Machine ATV340 DTM Library	V3.2.3
Altivar Machine ATV340	V3.2.3.0

2. Features

2.0 What's New in V3.2.3

>> Bug Fixes

2.1 Features V3.2.0

>> As part of the California CS Law compliance (IEC-62443-4-2 CR 1-1 Human user identification and authentication), the DTM comes with a new set of features meant to provide a more secured connection to the device over Modbus TCP (only applies to Ethernet and PROFINET fieldbuses)

>> In a few words:

>> User authentication will be required at every attempt to connect to the device. **Note:** this mechanism is by default enabled but the user can still disable it if required.

>> A default password is provided by the factory setting (available in the Keypad), however the user will be requested at each authentication attempt, to define a different and secured password (according to a customizable password policy). It remains possible to keep the default password temporarily, but the same reminder will pop up over again during next connection attempts

>> The User authentication can be enabled/disabled and the Password policy can be modified from the Security node (Parameters List tab) of the considered fieldbus

Note: For legacy option card (Modbus TCP/PROFINET), User authentication and Password Policy configuration will be deactivated since they are not supported by these version of cards.

>> Support for new firmware versions

>> V3.2IE26_B02 -> Support the User authentication for California Law compliance purposes

>> Bug Fixes

>> Updated help and programming manuals

2.2 Features V3.1.0

>> Support for ATV340 firmware version V3.1IE24_B40

>> Bug Fixes

2.3 Features V2.1.4

>> Support for Safety related ATV340 firmware version V1.6IE81_B01 and Safety module firmware version V1.1IE02_B01

>> Bug Fixes

2.4 Features V2.1.3

>> Bug Fixes

2.5 Features V2.1.2

>> Support for Functional Safety in Direct Safety Logic Mode with additional tabs in the DTM : Safety Display and Safety Conf

>> Support for Safety related ATV340 firmware version V1.6IE80_B06 and Safety module firmware version V1.1IE01_B01

>> Bug Fixes

2.6 Features V2.1.0

> Support of ATV340 Firmware V2.1IE17_B13

> Bug Fixes

2.7 Features V1.9.0

> Support of ATV340 Firmware V1.7IE15_B10 & V1.9IE16_B20

> Bug Fixes

2.8 Features V1.7.0

> Support for FW compatibility

> Multi Configuration/ Multi Motor support

> Bug Fixes

2.9 Features V1.6.3

> Fix for FMK Version incompatibility

> Bug Fixes

2.10 Features V1.6.1

> Support of ATV340 Firmware V1.6IE11_B11

> Bug Fixes.

2.11 Features V1.3.3

> Support of ATV340 Firmware V1.5IE10_B06.

> Bug Fixes.

2.12 Features V1.2.7

> Support of ATV340 Firmware V1.4IE09_B04.

> Bug Fixes.

2.13 Features V1.2.4

> Support for Sercos references.

2.14 Features V1.2.3

> Cyber Security Fixes

2.15 Features V1.2.2

> Create/Modify Topology bug fixes .

> DPI issue fixes.

2.16 Features V1.2.1

> Bug Fixes

2.17 Features V1.2.0

> Bug Fixes.

2.18 Features V1.1

> A new Simple Altivar Machine ATV340 drive reference selection .

> Support of ATV340 Firmware V1.1IE01B06 and Ethernet Firmware A1.8IE12B25.

> Parameter graphical sketch views for Analog Encoder, Resolver and Digital Encoder (SSI configuration)

> Support for EtherCAT option card Support of PROFINET option card.

> FDR screen & action status.

- > Offline FDR transfer in Schneider Electric's Unity FDT container.
- > Parameters can now be added into the IO scanner list via entering the logical address.
- > Detailed Error Diagnostics by including error sub-codes.
- > Updates in the ATV340 help file.
- > Light weight DTM with reduced size before and after Installation.
- > More informative My device tab.
- > My Dashboard section to configure and monitor drive parameters in a single screen.
- > parameter layout tab to configure drive parameters in a graphical and user guided interface. .
- > Diagnostic tab for error and warning monitoring
- > Diagnostic Tab - Improved layout of error data with historic errors
- > Diagnostic Tab - Warnings can be assigned to 5 groups
- > Diagnostic Tab - A summary screen for better drive health statistics.
- > The Display tab to show energy consumed by the drive in hourly, daily, monthly and yearly basis.
- > The Display tab - Display drive & motor parameters monitoring in graphical widgets
- > Display tab - Torque/Speed Curve.
- > Display tab - Data logging for loading logged in the device.
- > Unit Customization Feature to personalize parameter Units.
- > Warning and Error status information section in tool bar.
- > New motor control Panel to test the motor running conditions. .
- > Import/Export of device configuration from device to pc and vice versa.
- > Standard Protection,Factory Setting,HMI Personalization Feature.
- > Field bus manuals for option boards can be opened from My Device tab.
- > Creation and modification of QR-code through HMI Personalization screen.
- > Device Configuration can be restored completely or partial.
- > New Print feature to select printable data like Option board parameters etc.
- > Additional parameters are displayed in the Display tab.
- > Reboot drive command in the Device menu.
- > Save/Restore configuration from the drive through the device menu.
- > Support of Advanced Ethernet DID in DIO ring.
- > Autotune the device for the motor with Erase options.
- > Support of only English is available in the first version of this software .

3. System Requirement

3.1 Supported operating systems

This software can be installed on the following operating systems:

- > Microsoft Windows 10 32/64-bit .
- > Microsoft Windows 7 32/64-bit .
- > Microsoft Windows 8.1 32/64-bit .

3.2 Minimum PC Requirements

Equipment	Minimum
Processor	Pentium 4 or equivalent (Core 2 Duo recommended)
RAM	1 GB
Free Hard Disk Space	1 GB of free disk space Must be available

Display	Resolution: 1024 x 768 pixels with 32 bit colors DPI: 96 (100%)
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3.3 Recommended PC Requirements

Equipment	Recommended
Processor	Pentium 4 or equivalent (Core 2 Duo recommended)
RAM	2 GB
Free Hard Disk Space	2 GB
Display	Resolution: 1920 x 1080 pixels with 32 bit colors DPI: 96 (100%)

4. Some restrictions which we are working on

- > DTM is not in synchronized state after doing factory reset, a "Refresh" or "Load from Device" is requested.
- > Sometimes parameter values cannot be edited in parameter grid inside parameter list tab .Use F2 key to edit parameter values.
- > Only English is available in the first version of this software.
- > Local Stop Message will not be displayed,if Local Stop button is pressed momentarily or quickly.The button has to be pressed firmly for 4-5 Sec.
- > Visibility or disabling of a parameter depending on other parameter(s) are not managed at the moment in the parameter grid.
- > We observed that for some drive references, the CLI (Current Limitation) parameter does not reset after a factory setting.
- > Software does not respond after you try to select all parameters in the parameter tab using Ctrl + A.
- > Import of configuration stored in the Keypad HMI from SoMove homepage is not yet available.
- > MultiMotor switching sketchview is not yet available.

5. Container Supported

- > SoMove V2.8.3 and earlier
- > ESME V1.2
- > M&M FDT Container V4.6.19323.2
- > Control Expert V14.1

6. Altivar Machine DTM in ESME

6.1 Versions Provided & Compatibility

Activity	Version
Altivar Machine ATV340 DTM	V3.2.3.0
Altivar Machine ATV340 Firmware	V1.1IE02, V1.4IE09, V1.5IE10, V1.6IE11, V1.6IE81_B01, V1.7IE15, V1.9IE16, V2.1IE17, V3.1IE24, V3.2IE25, V3.2IE26
Safety Module	V1.1IE02_B01
ESME	V1.2

7. Altivar Machine DTM in Control Expert

7.1 Versions Provided & Compatibility

Activity	Version
Altivar Machine ATV340 DTM	V3.2.3.0
Altivar Machine ATV340 Firmware	V1.1IE02, V1.4IE09, V1.5IE10, V1.6IE11, V1.6IE81_B01, V1.7IE15, V1.9IE16, V2.1IE17, V3.1IE24, V3.2IE25, V3.2IE26
Safety Module	V1.1IE02_B01
Control Expert	V14.1
EcoStruxure Control Expert PSx DTM Library	V3.12.20
M580 CPU RUN boot	V2.80
M580 BME CPU	V2.80

8.1 Known issues or Observations:

- > Pencil Icon (data set changed) that enables the Apply button appears when there is preset conf settings configuration is exported and imported back
- > Sometimes while performing load from device, resetting, open of .sft file, Safety Message pop up appears when SC08 is set to Level / Auto without entering the SC08 control
- > Labels that are too long are cropped in the Safety Display tab
- > While performing store to device using Modbus TCP with multi config feature, increase Global Time out to 5000ms in the SoMove container Modbus TCP scan - advanced settings.
- > While modifying the topology with MultiConfiguration configured, Device Reference and Option Card changes are only supported . Firmware Version change is not supported.
- > Help feature is not available in this version. It will be updated in the next version once finalized from Technical Publication team.
- > If the drive is configured with multi configuration, drive configuration has to be saved in the DTM for configurations 1,2,and 3 before downloading to the drive.
- > Multiconfiguration feature with Input and Output Assignments of the Option card is not supported.
- > Current version of the DTM has connection issues with Pactware V5.0
- > Connection Interruption in SoMachine FDT Container if there are multiple instances of DTM
- > Synchronization issues may occur while transferring a project to a protected device in SoMachine
- > Creating Topology for more than 8 DTM instances leads to exception in SoMachine
- > Continuous opening and closing of device view screen leads to disfigured display .
- > Extended Relays are not Good In DashBoard .
- > Restore of configuration is not happening for some parameters .
- > Cannot import .cfg files for reference ATV340D18N4E created with DTM version V.1.7 and earlier
- > Downloading a configuration with a version anterior to V3.2IE25_B07 will automatically and inevitably enable the User authentication feature.
- > In EcoStruxure Control Expert and EcoStruxure Machine Expert , the "Return", "Tab", and "Esc" keys are not processed during Login, Change Password, Security panels or any notification dialogs.
- > Download to device fails when Multi Configuration is active. To workaround this issue, the timeout has to be increased to 5000ms in the communication dtms settings
- > Under M580 EIP protocol, whenever there is a channel policy switched from OFF -> ON either by keypad or by DTM while DTM is ONLINE, it results in connection lost.

The reason is when drive rejects the private request after the policy is ON, Master Comm DTM does not return correct response . Master DTM returns response as a communication error which is not valid in this scenario, the device DTM is not able to do a handshake again and login.

This will be rectified in the upcoming releases of the M580 DTM. Until then the following use cases will be a limitation resulting in a connection lost and the user must reconnect to continue with the operation

1. When DTM is ONLINE and user modify channel policy from OFF -> ON through Keypad.
2. When DTM is ONLINE and user applied channel policy from OFF -> ON through DTM
3. When DTM download a config package where channel policy is ON to device.