

Driver Vortex Master / Swirl Master

Vortex & Swirl Flowmeter

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*) DTM500 Bundle Supplement Info is available on the data medium \documentation or latest on www.abb.com/fieldbus.
Enter here in the search field following No. "3KXD801500R3901".

1 Device - Revision Record - What is new?

1.1 Device Type ID: 1A9F

1.1.1 Hardware

Released Revision	Released Date	Remarks
01.00.00	Jan 2014	First release

1.1.2 Software

Released Revision	Released Date	Remarks
01.01.09	Jan.2014	First release
01.03.00	Nov 2015	1 st revision (device type 1A9F)

1.1.3 Device (latest SW compatibility status)

Released Revision	Released Date	Remarks
01	Jan 2014	First release

1.1.4 Supported devices

FSS430, FSS450 - Swirl Flowmeter FSS400 HART SwirlMaster

1.2 Device Type ID: 1AA3

1.2.1 Hardware

Released Revision	Released Date	Remarks
01.00.00	Jan 2014	First release

1.2.2 Software

Released Revision	Released Date	Remarks
01.01.09	Jan.2014	First release
01.04.00	Nov. 2016	Extension for hot water calculation, SIL release (device type 1AA3)
02.00.02	Dec 2021	Enhancements, Command 200 added
02.01.02	Nov 2024	Enhancement

1.2.3 Device (latest SW compatibility status)

Released Revision	Released Date	Remarks
01	Jan 2014	First release
02	Aug 2020	First release

1.2.4 Supported devices

FSV430, FSV450 - Vortex Flowmeter FSV400 HART VortexMaster

1.3 Cyber Security info

1.3.1 ABB recommendation

It is recommended to use at least an anti-malware solution wherever the product is deployed.

1.3.2 Disclaimer

This product is designed to be connected to and to communicate information and data via a network interface. It is user's sole responsibility to provide and continuously ensure a secure connection between the product and user's network or any other network (as the case may be). User shall establish and maintain any appropriate measures (such as but not limited to the installation of firewalls, application of authentication measures, encryption of data, installation of anti-virus programs, etc) to protect the product, the network, its system and the interface against any kind of security breaches, unauthorized access, interference, intrusion,

leakage and/or theft of data or information. ABB Ltd and its affiliates are not liable for damages and/or losses related to such security breaches, any unauthorized access, interference, intrusion, leakage and/or theft of data or information.

1.4 Licensing

The “General terms of license for computer soft-ware utilization” are valid, which can be found by searching on abb.com

2 DTM (Device Type Manager)

2.1 Supported Devices

- FSV430, FSV450 - Vortex Flowmeter FSV400 HART VortexMaster with HW Version 01.01.00, SW Version 01.01.xx and Device Version 01 or higher.
- FSS430, FSS450 - Swirl Flowmeter FSS400 HART SwirlMaster with HW Version 01.01.00, SW Version 01.01.xx and Device Version 01 or higher.

2.2 Hash Code

Hash code of 3KXF300400S0202_DTM_FSX400_HART.zip

902D775AAF5D19C776A3B7B833FEF87465EDD756D42C3B8014D44E6E7A3ED2D3

2.3 DTM (driver) Version record - What is new?

2.3.1 Device Type ID: 1A9F

Released Version	Released Date	DTM LIBRARY Version	Remarks DTM
05.00.00	03.2014	≥ 05.04.00 ≥ 05.00.20	- First release Part of the DTM500 Bundle
05.00.01	11.2016	≥ 05.05.00 ≥ 05.00.22	Bug fixing New DTM library for “Observer role” in DCS

2.3.2 Device Type ID: 1AA3

Released Version	Released Date	DTM LIBRARY Version	Remarks DTM
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05.01.00	12.2016	≥ 05.05.00 ≥ 05.00.22	new release for de- vice type 1AA3
05.01.01	03.2019	≥ 05.05.00 ≥ 05.00.22	Bug fixing Responds code
07.02.00	07.2025	DTM 700	DTM 700

The device DTM supports the standard FDT 1.2 / 1.2.1.

2.4 Supported Languages

The device DTM supports English

2.5 Requirements

2.5.1 PC-Hardware, Operating system

DTM 500

See DTM500 bundle Supplement Info*)

DTM 700

Minimum requirement:

2-GHz-Processor or better with 32 Bit (x86) or 64 Bit (x64)

1 GB RAM or better

500 MB free hard disk space

1024 x 768 screen resolution recommended

Microsoft Windows 7 Service Pack 1, Windows 8.1 & Windows 10, 11 (32 Bit / 64 Bit variants supported)

Microsoft .NET Framework 4.6.1

Microsoft Visual C++ 2015 Redistributable - 14.0.23026

Microsoft Internet Explorer 6.0 or higher

Adobe Reader latest version

2.5.2 Frame application / compatibility

DTM 500

See DTM500 Bundle Supplement Info*)

DTM 700

- The ABB DTM should be usable in all frame applications according to the requirements of FDT 1.2.
- Refer the corresponding frame application documentation and Manuals

2.6 (Un)Installation and configuration

2.6.1 Installation

DTM 500

See DTM500 Bundle Supplement Info*)

DTM 700

Ensure that the minimum hardware requirements are met.

Start Windows (login with administrator rights!).

Cancel all active applications.

Unpack the DTM zip file available as download from www.abb.com/Instrumentation

Start the installation Wizard as follows:

Right hand Mouse Click with “run as Administrator”

```
<drive>:\..\3KXF300400S0202_DTM_FSX400_HART.zip\  
3KXF300400S0202_DTM_FSX400_HART\MID-001A_DID-  
1AA3\Revision_07.02.00\DTM FSx400 HART.exe
```

Follow the instructions

2.6.2 Uninstall instructions

DTM 500

See DTM500 Bundle Supplement Info*)

DTM 700

In the operating system: Start -> Settings -> Control Panel -> Add/Remove Programs -> Select the DTM and Uninstall.

2.7 Update- / Upgrade instructions

DTM 500

See DTM500 Bundle Supplement Info*)

DTM 700

- Install this version 07.02.00 as a fresh installation. Only in case of upgrade from DTM500 to DTM700, uninstallation of DTM500 to be followed as specified in DTM500 Bundle supplementary In-formation document before proceeding with DTM700 installation.

– Hints regarding new versions may be found under www.abb.com/Fieldbus

2.8 Known problems and limitations

DTM 500

None

DTM 700

- 1) Limitation: DTM connection states are not up-dated – Communication DTM shall provide up-dated communication states on disturbed, aborted, standby, connected, disconnected.
- 2) DTM is not tested with Symphony Harmony due to FDT issue – working with Harmony team to resolve
- 3) DTM window resizes when goes online/offline parameterization. Observed in AVB

2.9 Getting help / further information

Press 'F1' for DTM online help.

Help concerning the integration of the DTM in the FDT frame application can be found in the respective documentation of the frame application.

2.9.1 How to get the latest information & software?

The latest device driver Supplement Info & software (driver) is available on www.abb.com/measurement

3 EDD (Electronic Device Description)

3.1 Supported devices

- FSV430, FSV450 - Vortex Flowmeter FSV400 HART VortexMaster
- FSS430, FSS450 - Swirl Flowmeter FSS400 HART SwirlMaster

3.2 Hash Code

Hash code of 3KXF300400S0003_EDD_FSX400_HART.ZIP:
7C7CAB3CD59CFB610F75B0BCA9AA04F53BDA628D272986C855FED7D08F7976B3

3.3 EDD Version record - What is new?

3.3.1 Device Type ID: 1A9F

Released Version (Dev Rev)	Released Date	Remarks	Hashcode
01 01	July 2013	First release for device type 1A9F (for device FW ≤ 01.03.00)	
01 02	Oct 2016	Bug fixing	Hashcode for 0102.fm8: 73CF8F390F33A201A0010FB8096D27526141F8 33B534E3FD95BADAF15A0CEF86

3.3.2 Device Type ID: 1AA3

Released Version (Dev Rev)	Released Date	Remarks	Hashcode
01 03	Dec.2016	New release for device type 1AA3 (for device FW ≥ 01.04.00)	Hashcode for 0103.fm8: 44139B033F5776EDB2BE4A1E944E1E6367A9CE 381C39D7809DE96BFE6731452C
01 04	Nov. 2018	For AMS only	Hashcode for 0104.fm8: 86561D130F2803957085BD433EC88F6F6EFEB A63185655A195F514C2B7345A07
01 05	Dec 2021	Enhancements-Service menu	Hashcode for 0105.fm8: 7206620FDBAEF7125C8544F17229A14D0D1AA C16EE31FDD33AA49A28150C8CF2

3.4 Supported Languages

The device EDD supports English

3.5 Requirements

Compatible to IEC61804-3, -4, -5 Electronic De-vice Description Language (EDDL)

3.6 Remove / import and configuration

Start your EDD Host application and follow the instructions.

3.7 Known problems and limitations

None

3.8 Getting help / further information

Help concerning the integration of the driver in the EDD Host application can be found in the respective documentation of the frame application.

Use mouse over for field hints and tooltips.

4 FDI (Field Device Integration)

FDI Package (EDD based)

4.1 FDI Device Package Version record- What is new?

4.1.1 Device Type ID: 1A9F

Released Date	Package Version	EDD Released Version (Dev Rev)	Attachment (revision)	UIP Released Version (00.00.00), Winx	UIP Changed UIP file count	Remarks (EDD. Attachment, UIP)
None	None					

4.1.2 Device Type ID: 1AA3

Released Date	Package Version	EDD Released Version (Dev Rev)	Attachment (revision)	UIP Released Version (00.00.00), Winx	UIP Changed UIP file count	Remarks (EDD. Attachment, UIP)
Nov. 2018	01.01.00	01 04	FSS_FSV_family_256x256.png OI_FSV_FSS_430_450_EN_E.pdf	AGA_GERG_Calculations.1.0.5.uip,	yes	First release (Device Type 1AA3)
Dec 2021	01.05.00	01 05	FSS_FSV_family_256x256.png OI_FSV_FSS_430_450_EN_E.pdf	FSx4xx_DiagnosticsHistoryUIP.1.0.0.uip AGA_GERG_Calculations.1.0.5.uip	yes	Enhancements, new UIP added

4.2 Supported Languages

The device package supports English

4.3 Requirements

FDI Technology Version 1.2.0

4.4 Remove / import and configuration

Start your FDI Host application and follow the instructions.

4.5 Update / Upgrade instructions

No

4.6 Known problems and limitations

None

4.7 Getting help / further information

Help concerning the integration of the Package in the FDI frame application can be found in the respective documentation of the frame application.

Use mouse over for field hints and tooltips.

5 How to get the latest information & software?

The latest device driver Supplement Info & software (driver) is available on www.abb.com/measurement

Contacts

ABB Measurement & Analytics

For your local ABB contact,

visit: abb.com/contacts

For more product information,

visit: www.abb.com/measurement

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