

DTM Bundle & DAT200 Asset Vision Basic for intelligent field devices



DTM500 bundle

- Contains ABB device driver (DTM)
- Supports FDT Standard 1.2/1.2.1
- Adheres to the FDT Style Guide
- Graphical overview of DTM functions
- Easy Set-up wizard
- Diagnostics in accordance with NAMUR NE107; provides additional maintenance information

DTM400 bundle

- Contains ABB device driver (DTM)
- Supports FDT Standard 1.2
- Diagnostic information

DAT200 Asset Vision Basic

- FDT frame application for configuration, diagnostics, and maintenance tasks on intelligent devices
- Supports FDT Standard 1.2/1.2.1
- Supports all current fieldbus protocols via communication DTMs
- Point-to-point wizard
- Create a project tree at the touch of a button
- Structured according to user accounts and in line with the FDT Style Guide, with password protection if required
- Online help
- Supported by .NET 2.0

DTM Bundle & DAT200 Asset Vision Basic for intelligent field devices

FDT / DTM technology

FDT technology makes an important contribution towards ensuring unrestricted utilization of the fieldbus potential by standardizing the communication interface between the field devices and the systems.

A key feature is its independence from the communications protocol, the software environment for the devices, and the host systems. Using FDT, it is possible for any host to access any device - via any protocol.

The heart of the FDT concept lies in the Device Type Manager (DTM), a component offered by ABB for a multitude of devices. It can be used in any system that supports the FDT interface.

The DTM is the configuration and management component of a field device. It is familiar with all the rules governing devices (plausibility checks), and contains all graphical user dialogs, the device configuration, diagnostics, and maintenance.

DTMs are loaded into the libraries of the automation system or of stand-alone tools, in a similar way to a printer driver in an office environment.

DTM bundles

General information

"ABB DTM400" and "ABB DTM500" are names given to ABB DTM bundles for HART, PROFIBUS, FOUNDATION Fieldbus, and MODBUS devices.

Applications

- Configuration and parameterization of devices
- Diagnostics for devices and retrieval of status messages
- Online and offline display of device data (measurement data; diagnostics, configuration / parameterization, and status information) in multivisual form

Parameterization

- Graphics-based overview of parameter groups
- Online / offline configuration
- Upload device data: Read parameterization / configuration information from device
- Download device data:
 - Write stored device data back into the device
- "Easy Set-up" program wizard for guided, quick parameterization of intelligent devices
- Non-identical device parameters in instance data record and physical device are clearly marked

Online display of measurement and status data

- Select how measured values are displayed:
 - Numerically
 - As a bar with alarm limits
 - As an analog dial
 - As a trend graph
- All graphical elements feature a scalable time axis.
- Status and diagnostics in accordance with NAMUR
 - Includes information (DAT500) on "possible cause" and "recommended action"

Archiving

- Back up and load TAG-related device data
- Print selectable device data (DTM500)

Other features

- Select from two display windows (DTM500):
 - Main Operation**
Display all of the DTM functions in a single window
 - Application**
Display selected DTM functions in individual windows
- Navigation area with tree structure (DTM500)
- Comprehensive online help available throughout the DTM

IMPORTANT (NOTE)

Information on

- system requirements (hardware / software)
- number and type of DTMs in each of the bundles
- licensing

is available either in "Supplement Info" under \Documentation on the data storage medium supplied, or at www.abb.com/fieldbus.
On the Internet site, enter the following number in the Search box:

- For the DTM400 bundle: "3KXD801400R3903"
- For the DTM500 bundle: "3KXD801500R3903"

Overview of DTM400 and DTM500 bundle

Bundle	FDT Specification		Windows operating system ¹				DTM Style Guide	Graphics-based overview	Easy Set-up
	1.2	1.2.1	2000	XP	Vista	7			
DTM400	•	-	•	•	-	-	-	-	-
DTM500	•	•	•	•	•	•	•	•	•

¹ For minimum operating system requirements (e.g., Service Pack), see "Important information"

DAT200 Asset Vision Basic

General information

Asset Vision Basic is an FDT frame application used for configuration, diagnostics, and maintenance tasks on intelligent devices.

Asset Vision Basic offers support for devices using all current communication protocols via communication DTMs.

Asset Vision Basic contains a point-to-point wizard that is not only intuitive for users but also enables a device to be parameterized quickly.

Asset Vision Basic conforms to FDT Specification 1.2.1. and supports FDT 1.2; it is, therefore, open for certified DTMs.

Asset Vision Basic is supported by .Net 2.0.

Applications

- Provides the FDT frame for DTMs (device DTMs, communication DTMs, remote I/O DTMs, and so on)
- Straightforward tool for quick device parameterization (point-to-point wizard)
- Visual device overview that maps device communication links in systems (project tree)
- Saving / managing device data
- Device measuring point planning and management

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Management

- Management of devices and networks in projects
- Display and management of all installed DTMs (device catalog), incl. a filter function for sorting according to:
 - Device type
 - Manufacturer
 - Group
 - Protocol
- Assignment of measuring point names in the project manager (network)
- Assignment of device / DTM addresses in the project manager (network) via the communication DTMs
- Device recognition via device TAG number or address
- Simultaneous communication (online) with several devices
- Scanning of devices connected via communication DTMs
- Automatic generation of a project tree in the project manager (network) via communication DTMs

Archiving

- Back up and load project-related data
- Print project-related data

Point-to-point (Tool Mode) wizard

- The wizard guides you in opening a project for a device.
- The wizard assists you in configuring communication interfaces, finding the device, and selecting the right DTM.
- The wizard offers three modes:

Online

Automatic device selection, connection to device, and reading of device data

Offline

Manual device selection and display of device instance data

Open file

Opens a previously saved point-to-point project in Offline or Online mode

Other features

- Password protection available for user accounts with fixed roles
- Language settings
- Configuration of Tool Mode wizard
- Configuration of frame window and shortcuts
- Option of connecting FDT and error monitor
- Adaptable tool bar
- Application view can be switched to a tab or window
- Comprehensive online help available throughout the tool
- For minimum Windows operating system requirements (e.g., Service Pack), see "Important information"

IMPORTANT (NOTE)

Information on

- system requirements (hardware / software)
- registration

is available either in "Supplement Info" under \Documentation on the data storage medium supplied, or at www.abb.com/fieldbus.

On the Internet site, enter the following number in the Search box:

- "3KXD151200R3903"

Connection types

PROFIBUS connection via USB adapter

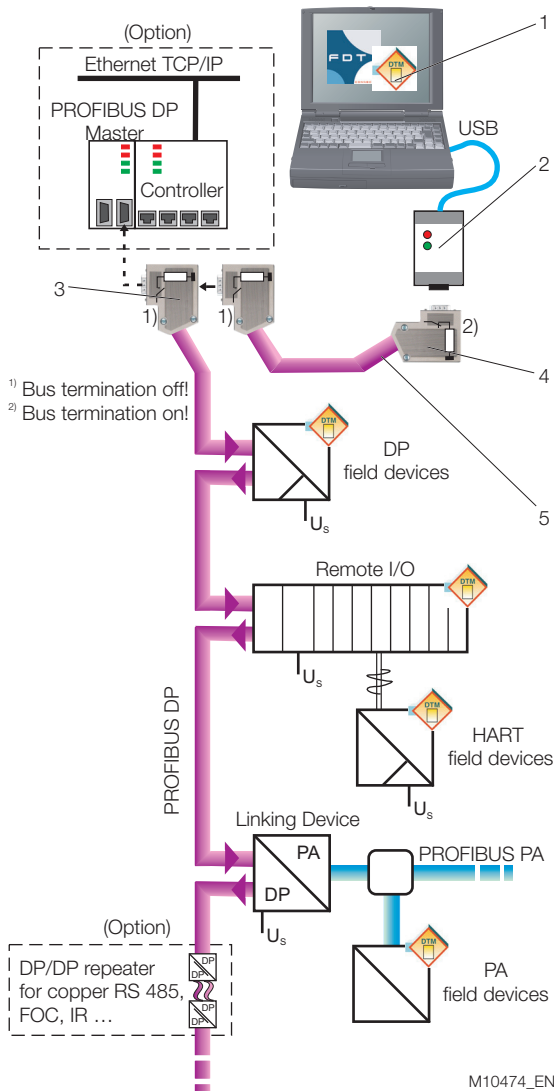


Fig. 1

	Description	Order number	Data sheet
1	DTM bundle and DAT200	9820027	DS/DTM/DAT200
	DTM bundle devices & Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: "is Pro adapter V3" ¹		
2	NDA121-NO	9890002	10/63-6.31
	USB - PROFIBUS DP / PC adapter		
3	NDE230-NO	9890119	10/63-6.40
	DP cable connector, 9-pin, SUB-D Incl. switchable bus termination and SUB-D programming connection, ≤ 12 Mbps, IP 40 Pin assignment IN: 1A = RxD/TxD-N, 1B = RxD/TxD-P OUT: 2A = RxD/TxD-N, 2B = RxD/TxD-P		
4	NDE220-NO	9890118	10/63-6.40
	DP cable connector, 9-pin, SUB-D Incl. switchable bus termination, ≤ 12 Mbps, IP 40 Pin assignment: IN: 1A = RxD/TxD-N, 1B = RxD/TxD-P OUT: 2A = RxD/TxD-N, 2B = RxD/TxD-P		
5	PROFIBUS DP cable, violet	989014x	10/63-6.47
	NDC110-NO - 2 x 0.32 mm ² (AWG 22/1), 65 / 330 / 1,000 m		

ABB field device overview

PROFIBUS DP	-	10/63-0.47
PROFIBUS PA	-	10/63-0.46

Installation suggestions

PROFIBUS DP / PA	-	10/63-0.40
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1 Recommended adapters / modems

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PROFIBUS connection via Ethernet gateway

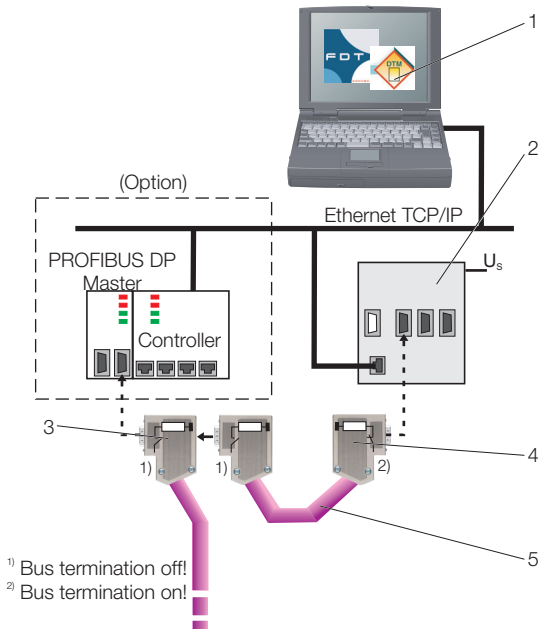


Fig. 2

M10475_EN

	Description	Order number	Data sheet
1	DTM bundle and DAT200 DTM bundle devices and Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: On request	9820027	DS/DTM/DAT200
2	Ethernet - PROFIBUS DP gateway On request		
3	NDE230-NO DP cable connector, 9-pin, SUB-D Incl. switchable bus termination and SUB-D programming connection, ≤ 12 Mbps, IP 40 Pin assignment IN: 1A = RxD/TxD-N, 1B = RxD/TxD-P OUT: 2A = RxD/TxD-N, 2B = RxD/TxD-P	9890119	10/63-6.40
4	NDE220-NO DP cable connector, 9-pin, SUB-D Incl. switchable bus termination, ≤ 12 Mbps, IP 40 Pin assignment: IN: 1A = RxD/TxD-N, 1B = RxD/TxD-P OUT: 2A = RxD/TxD-N, 2B = RxD/TxD-P	9890118	10/63-6.40
5	PROFIBUS DP cable, violet NDC110-NO - 2 x 0.32 mm ² (AWG 22/1), 65 / 330 / 1,000 m	989014x	10/63-6.47

HART connection via FSK / USB modem

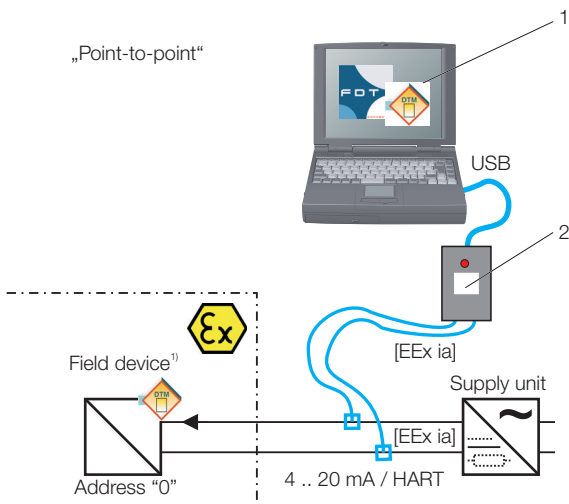


Fig. 3

M10476_EN

	Description	Order number	Data sheet
1	DTM bundle and DAT200 DTM bundle devices & Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: "is HRT USB v2" ¹	9820027	DS/DTM/DAT200
2	NHA121-NX USB - HART FSK / PC modem, electrical isolation, Ex protection type II (2) G [Ex ia] IIC NHA121-NO USB - HART FSK / PC modem, electrical isolation, non-Ex applications (alternative, not shown)	3KDE636710L0001 3KDE636710L0002	10/63-6.71 10/63-6.71

¹ Any HART devices. Not for TSx02 with "FSK 600 baud"

IMPORTANT (NOTE)

During workshop operation with a power supply unit, a 250 Ω resistor must be connected in series.

Conrac connection via Conrac cable

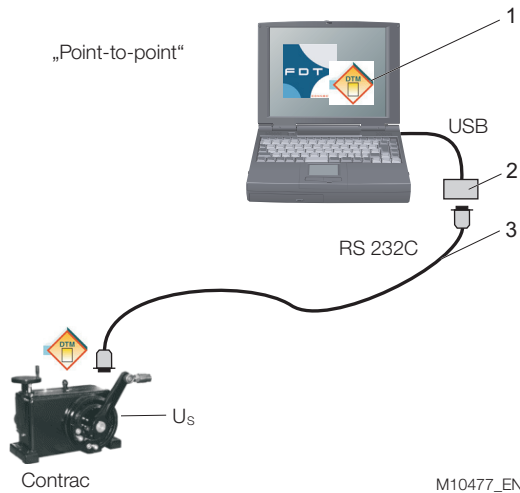


Fig. 4

	Description	Order number	Data sheet
1	DTM bundle and DAT200 DTM bundle devices and Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: "ABB HART Communication ServicePort"	9820027	DS/DTM/DAT200
2	USB RS232C adapter Not in ABB product portfolio	-	-
3	Configuration cable RS 232C - PC connection cable for Conrac (4 ... 20 mA, HART, or PROFIBUS DP-V0)	746349	10/68-7.20

FieldKey wireless HART adapter via FSK / USB modem

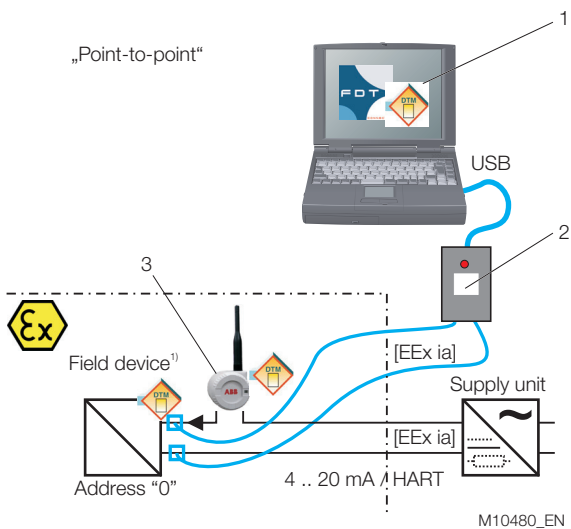


Fig. 5

	Description	Order number	Data sheet
1	DTM bundle and DAT200 DTM bundle devices and Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: "ABB HART Communication ServicePort" ¹	9820027	DS/DTM/DAT200
2	NHA121-NX USB - HART FSK / PC modem, electrical isolation, Ex protection type II (2) G [Ex ia] IIC	3KDE636710L0001	10/63-6.71
	NHA121-NO USB - HART FSK / PC modem, electrical isolation, non-Ex applications (alternative, not shown)	3KDE636710L0002	10/63-6.71
3	NHU200-WL (FieldKey) Wireless upgrade adapter for HART devices, wireless HART technology (Ex protection version planned)	NHU200	DS/NHU200

¹ Recommended adapters / modems

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HART connection via FSK / RS 232 modem

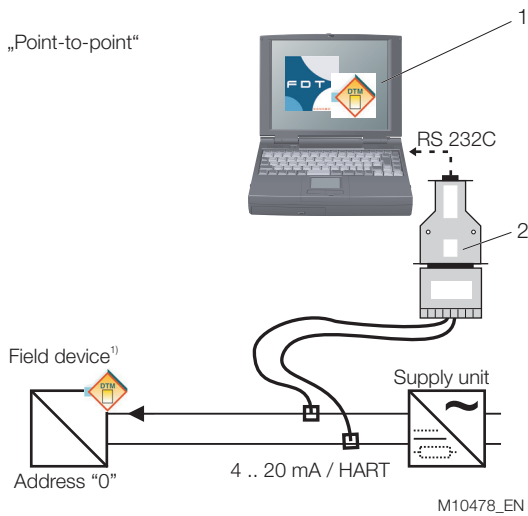


Fig. 6

HART connection via LCI / RS 232 adapter

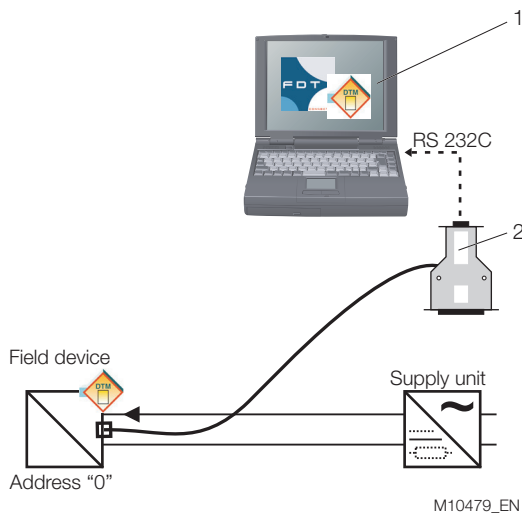


Fig. 7

	Description	Order number	Data sheet
1	DTM bundle and DAT200	9820027	DS/DTM/DAT200
	DTM bundle devices and Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: Not in ABB scope of delivery ¹		
2	NHA102-NO	7957838	10/63-6.71
	RS 232C - HART FSK / PC modem, non-Ex applications (Not suitable for USB / RS 232 adapters!)		

1 Any HART devices. Not for TSx02 with "FSK 600 baud"

IMPORTANT (NOTE)

During workshop operation with a power supply unit, a 250 Ω resistor must be connected in series.

	Description	Order number	Data sheet
1	DTM bundle and DAT200	9820027	DS/DTM/DAT200
	DTM bundle devices and Asset Vision Basic - driver and device management tool for configuration and parameterization of intelligent field devices. Communication DTM: Not in ABB scope of delivery ¹		
2	NHA102-NO	319621	10/63-6.71
	RS 232C-HART LCI / PC adapter with small connector for positioner (Not suitable for USB / RS 232 adapters!)		

1 Recommended communication DTM:
"M&M HART Communication DTM"
Supplier:
M&M Software GmbH, Industriestr. 5, 78112 St. Georgen,
GERMANY
Phone: +49 (0) 7724 / 9415-0, fax: +49 7724 / 9415-23
E-mail: fdt@mm-software.com

Ordering information

Description	Order number
<p>Device Management Software Bundle (on DVD) incl. DTM and Asset Vision Basic</p> <p>The DVD contains the following software packages with licenses:</p> <ul style="list-style-type: none">– DTM500 Bundle– DTM400 Bundle– DAT200 Asset Vision Basic– Communication DTM for HART und PROFIBUS <p>Comprehensive documentation with help, hints and installation tools incl. licence for data storage, import / export, printing</p> <p>DTM500 Bundle:</p> <ul style="list-style-type: none">– supports standard FDT1.2 / 1.2.1– Windows 2000, XP, Vista und 7 <p>DTM400 Bundle:</p> <ul style="list-style-type: none">– supports standard FDT1.2– Windows 2000 und XP <p>DAT200 "Asset Vision Basic"</p> <ul style="list-style-type: none">– ABB Software Tool for configuration, diagnostics and maintenance of smart devices– supports standard FDT1.2 / 1.2.1– Windows 2000, XP, Vista und 7 <p>You find the current available driver and "Supplement Info" within the Internet under www.abb.com/fieldbus</p> <p>Enter here the following no. in the search field:</p> <ul style="list-style-type: none">- for DTM500 "3KXD801500R3901"- for DTM400 "3KXD801400R3901"- for DAT200 "3KXD151200R3901" <p>Get more information about "Scaleable Device Management Tools" on the ABB web page www.abb.com/fieldbus</p>	9820027

Contact us

ABB Automation Products GmbH

Borsigstr. 2

63755 Alzenau

Germany

Tel: +49 551 905-534

Fax: +49 551 905-555

www.abb.com

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