

# General Specifications

FieldMate  
Versatile Device Management Wizard



## GS 01R01A01-01E

### 1. Features

FieldMate is available in a <Basic> and an <Advance> version with differentiated features provided.

**FieldMate <Basic>** is mainly used for the field device setting and adjustment, which are connected actually.

**FieldMate <Advance>**, additionally above, provides off line database function up to 300 devices registered for device maintenance information handling.

FieldMate is a PC based configuration tool that performs numerous tasks, including initial setup, daily maintenance, troubleshooting, and configuration backup for device replacement. These tasks are streamlined by FieldMate's intuitive operation and integrated environment, which is independent from communication protocols.

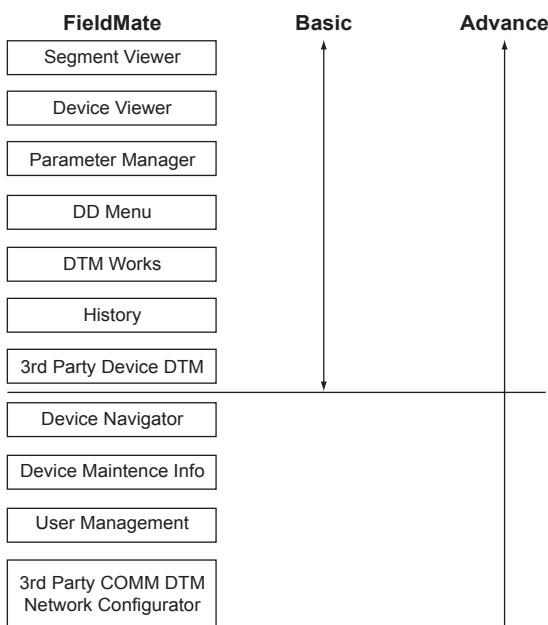
FieldMate incorporates the open FDT/DTM standard and is compliant with DTMs per the FDT 1.2 standard. Additionally, FieldMate supports both HART and Foundation Fieldbus via Device Description (DD), for devices that do not have DTMs available.

\*FDT: (Field Device Tool) defines the system environment in which the DTM runs.

\*DTM: (Device Type Manager) is the application which defines the Graphical User Interface (GUI) specific to the device.

### 2. Functional Details

The following columns identify the features available in both the Basic version and the Advanced version.



F001.ai

#### ■ Communication Function

FieldMate supports the following communication protocols:

- FOUNDATION fieldbus H1
- HART

#### ■ Device Interface Function

##### Segment Viewer

Displays a list of devices currently connected via HART or Fieldbus protocol, grouped by protocol. Basic device specific information is displayed (Device ID, Manufacturer ID, address, Device type, Device revision, and status)

##### Device Viewer

Displays the current status of the field device, including errors, warnings, good status. The status display icon (red, yellow, green) clearly indicates device's self-diagnostic status.

#### ■ Configuration Function

Device parameters can be easily configured.

#### ● Parameter Manager: HART, FF-H1

The Parameter Manager is a simple parameter viewing window, in which adjustment and field device replacement can easily be performed. Configuration files may be imported/exported from/to the device easily, and stored on the PC for future needs.

#### ● DD Menu: FF-H1

The existing Fieldbus DD is utilized to enable function block configuration.

#### ● DTM Works:

The DTM Works provides not only configuration, but easy setup, calibration, simulation wizards etc. as defined by the device vendors' DTM.

#### ■ History Function

Logs of operations are automatically recorded.

- 1) Date & Time
- 2) Device Tag
- 3) Device ID
- 4) User
- 5) Source: DTM works, DD Menu, Parameter Manager, etc.
- 6) Category: Configuration (device parameter change) and System (logs of login, etc.).
- 7) Message: Details log of changes

#### ■ 3rd Party DTM Function

This function provides device interface in compliance with FDT 1.2, enabling the features defined by the device vendor.

■ **Device Interface Function**

● **Device Navigator**

Shows all registered devices.  
 Provide a searching function by tag, device name, memo, etc.  
 Online registration and offline registration can directly be implemented from Segment Viewer  
 Marking it with flags to remind users of outstanding issues etc., simplifying daily maintenance.

■ **Database Function**

● **Device Maintenance Info.**

Provides advanced maintenance information consisting of:  
 - Device Information  
 - User memo  
 - Document link  
 - History

All information can be exported / imported, and can be saved as a "Device Template".  
 - Parameter Manager  
 - DTM works  
 Load and save the parameters to the database are performed.

■ **User management**

It defines users ID with password to identify who login and operate FieldMate. The user ID is displayed as the operation record in History.

■ **3rd Vendors' COMM DTM support**

Configure the communication route with COMM DTM combination by user, which enables: (i.e.)

- Access Profibus-PA/DP devices
- Access HART devices via Profibus

● **Network Configurator**

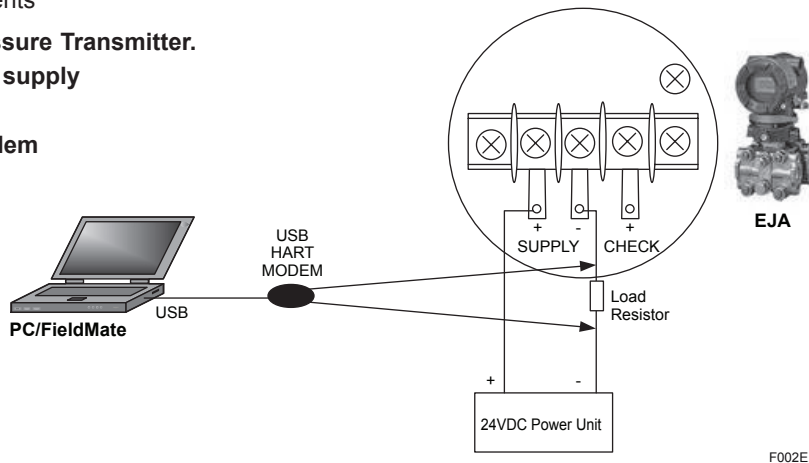
On "Network Configurator", user can build network topology by COMM DTM in advance.

**3. Connection Example (for reference)**

Sample HART configuration, connecting a pressure transmitter.

Required Components

- **HART EJA Pressure Transmitter.**
- **24 V DC Power supply**
- **Load Resistor**
- **USB HART Modem**



**4. System Requirements**

■ **Hardware Requirements**

- **PC**
  - Machine: IBM PC/AT compatible
  - CPU: Pentium III 1 GHz or faster (Pentium M/ Pentium 4 recommended)
  - Main memory: 256 MB or more (512 MB recommended)
  - Hard disc drive: 8 GB or more (minimum free space: 1GB)
  - CD-ROM drive: Windows XP compatible double-speed or faster compatible
  - Monitor: 256 colors or more, 1024 x 768 or better resolution recommended

**Network Port:**

**For HART device**

One USB or RS-232C port.

● **HART modem**

Yokogawa HART modem is available optionally (only USB).

**For FF-H1 device**

A slot for PCMCIA card or a PCI slot.

● **Fieldbus Interface Board (National Instruments)**

- PCMCIA - FBUS
- PCMCIA - FBUS/2
- PCI - FBUS/2
- NI-FBUS communication Manager 3.0 or higher.

■ **Software Requirements**

Windows XP Professional SP1 or above (English)

■ **Language (Displayed characters)**

English only.

< Advance >

■ **Profibus PCMCIA card and COMM DTM**

PROFIcard2 and PROFIdtm supplied by Softing

### 5. Model and Suffix Codes

Field device management software package: FieldMate Release: R1.02

#### MODEL, SUFFIX CODES

| Model         | Suffix Codes    | Description       | Remarks               |
|---------------|-----------------|-------------------|-----------------------|
| <b>FSA110</b> | .....           | FieldMate Basic   |                       |
| License       | <b>-S</b> ..... | Single PC license | License number issued |
| —             | <b>1</b> .....  | Always 1          |                       |
| Language      | <b>1</b> .....  | English           |                       |
| Option Code   | <b>/M</b> ..... | USB HART Modem    |                       |

CD-ROM: F9197DA

USB HART Modem: F9197UB

#### MODEL, SUFFIX CODES

| Model         | Suffix Codes    | Description       | Remarks               |
|---------------|-----------------|-------------------|-----------------------|
| <b>FSA111</b> | .....           | FieldMate Advance |                       |
| License       | <b>-S</b> ..... | Single PC license | License number issued |
| —             | <b>1</b> .....  | Always 1          |                       |
| Language      | <b>1</b> .....  | English           |                       |
| Option Code   | <b>/M</b> ..... | USB HART Modem    |                       |

CD-ROM: F9197DA

USB HART Modem: F9197UB

### 6. External View

External view of USB HART modem.

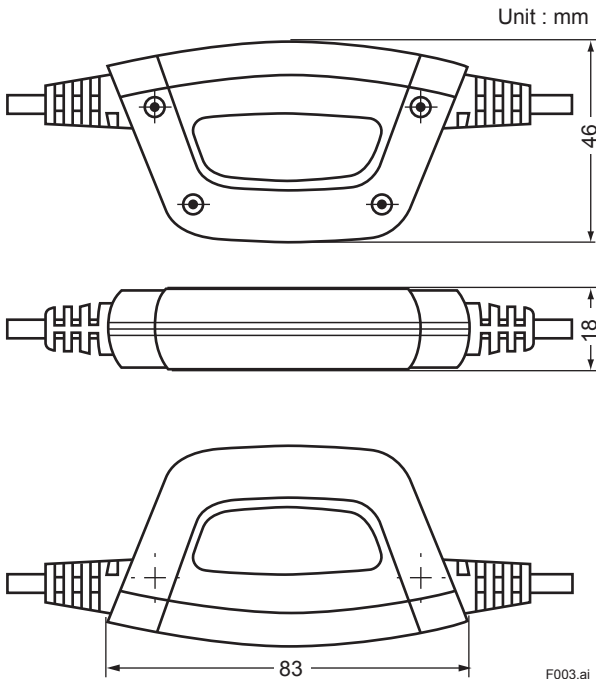


Fig. 3: USB HART Modem

Total cable length: Approximately 2.3m

| Technical Specifications | USB HART Interface                                  |
|--------------------------|---|
| SOFTWARE                 |   |
| Operating System         | Windows XP Professional                             |
| USB Interface            | USB2.0 standard (*1)                                |
| ELECTRICAL               |   |
| Power Supply             | System powered by USB Port                          |
| Supply Current           | 40mA@ + 5 V   |
| Pins to Computer         | USB Type-A connector                                |
| Pins to HART Device      | 2-pin, polarity insensitive Mini-grabber test clips |
| Output Level             | 0.5 + / - 0.1 Vpp trapezoidal wave@1200/2200 Hz     |
| Isolation(DC)            | 1910 VDC between instrument and computer            |
| Isolation(AC)            | 1350 Vrms (50Hz)                                    |
| ENVIRONMENTAL            |   |
| Operating Temperature    | 0 °C to 55 °C                                       |
| Storage Temperature      | -40 °C to 70 °C                                     |
| Storage Humidity         | 0% to 95% relative humidity                         |
| PHYSICAL DIMENSIONS      |   |
| Enclosure                | 83 x 46 x 18 mm, ABS industrial enclosure           |
| Test Clip Cable          | 190 cm, 2-stand wire terminating in two test clips  |
| USB Cable                | 27 cm cable terminating in a USB type A connector   |
| CERTIFICATION            | EN61326   |

\*1: USB2.0 also covers USB1.0

## 7. Included Items

For an order of FieldMate, the following items are included in the package:

### <Product>

- CD-ROM
- USB HART modem w/ cables (optional)

### <Paper>

- License number sheet and user registration information
- Software license agreement
- Getting Started
- Release Note

## 8. Items Contained in Media

### ■ Items contained in the CD-ROM of FieldMate R1.02:

- FieldMate Program
- USB HART modem driver
- Device DTM for Yokogawa devices
- Device DTM for the HART devices \*1
- DD for the FF-H1 devices \*2
- DD for the HART devices \*1
- Users Manual of FieldMate
- Users Manual of USB HART Modem

\*1: Devices registered with HART Communication Foundation, some DTM or DD may not be included.

\*2: Devices registered with Fieldbus Foundation, some DD may not be included.

#### Remarks:

Yokogawa certifies the quality and operability only of DD and DTM which have been registered by Yokogawa.

## 9. User Registration

FieldMate may be installed on a single PC using the license number provided. FieldMate may be used for up to 30 days without registration.

For permanent installation, user registration is required. After registration an Activation Key is provided to the user. User registration can be done on the Our User Registration web site or by fax. The items required for user registration are the license number and HD serial number of the PC to which FieldMate is installed.

## 10. Trademarks

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