

Instrument Configuration Software • March 2008



million
in one

dolphin
PLUS

SIEMENS

Safety Guidelines: Warning notices must be observed to ensure personal safety as well as that of others, and to protect the product and the connected equipment. These warning notices are accompanied by a clarification of the level of caution to be observed.

Qualified Personnel: This device/system may only be set up and operated in conjunction with this manual. Qualified personnel are only authorized to install and operate this equipment in accordance with established safety practices and standards.

Unit Repair and Excluded Liability:

- The user is responsible for all changes and repairs made to the device by the user or the user's agent.
- All new components are to be provided by Siemens Milltronics Process Instruments Inc.
- Restrict repair to faulty components only.
- Do not reuse faulty components.

Warning: This product can only function properly and safely if it is correctly transported, stored, installed, set up, operated, and maintained.

This product is intended for use in industrial areas. Operation of this equipment in a residential area may cause interference to several frequency based communications.

Note: Always use product in accordance with specifications.

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Dolphin Plus Introduction

This product is intended for use in industrial areas. Operation of this equipment in a residential area may cause interference to several frequency based communications.

Dolphin Plus is the configuration and diagnostic tool used with Siemens measurement instruments.

Dolphin Plus Features

- manage instrument parameters
 - configure parameters with or without a connected instrument
 - upload and download parameters from an instrument
 - open and save parameter sets from disk
- monitor parameters in real time
- view the measured value as a bar graph
- save and view echo profiles for level instruments

Note: Use the online help for instructions on these and other tasks.

System Requirements

- Dolphin-compatible Siemens instrument
- 486/66 or better processor (Pentium/120 or better recommended)
- 16MB RAM (32MB recommended)
- Windows 95/98, NT 4.0, Windows ME, Windows 2000, Windows XP
- 640x480 or higher with 256 colours (800x600 or higher resolution recommended)
- CD-ROM drive for installation
- RS-232 serial connection
- RS-485 converter (if required by instrument)
- Siemens ComVerter (if required by instrument)

Specification

For equipment used with Dolphin Plus software to configure and monitor Siemens instruments.

ComVerter (optional)

Power

- 9V battery (style ANSI / NEDA 1604)

Temperature

- – 20° C to 50° C (– 5° F to 122° F)

Enclosure

- 67mm x 100mm x 35mm
- Plastic Body
- Modular jack, RJ-11 (telephone) style

Communication

- Serial from IBM PC
- optically coupled to Siemens instruments

Patents

- South Africa: 93/5198
- Pending USA, Canada

Approvals

- CE

Cable (included)

- 2.1m (7 ft)
- Modular RJ-11 (telephone) plug both ends

Adapter (included)

- RJ-11 (telephone) to DB-9 (PC-Serial)

RS-232 to RS-485 converter

- direct connect (powered from PC serial port)
- optically isolated (externally powered)

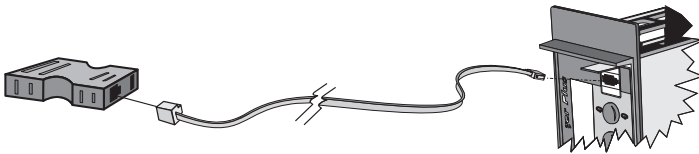
Connecting Dolphin Plus

For parameter and flash upgrades, Dolphin Plus configuration software needs to have access to the instrument.

Serial Cable Connection

Direct Connect

Some instruments (especially rack mount and panel mount models) have a RJ-11 (modular telephone) jack built into the front.



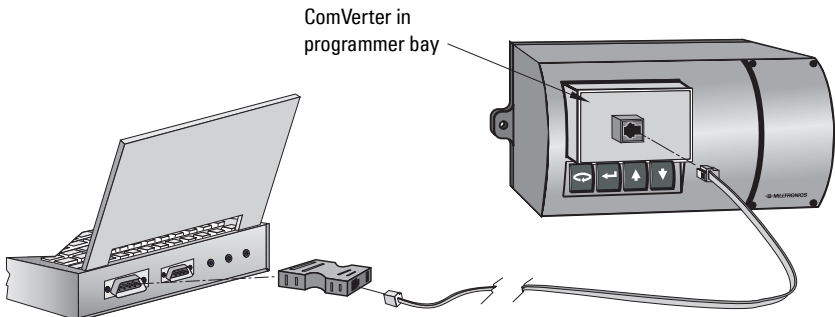
Note: The Siemens Milltronics BW500 and SF500 wallmount units have a direct connection inside the closure. For temporary access (upgrades), open lid and plug the jack in. For permanent installation, consult the instrument manual.

Required Equipment

- RJ-11 equipped, two-wire, modular telephone cable (included) long enough to reach from the instrument to your computer. The maximum modular cable length is 2.1m (7 ft.).
- 9-pin to RJ-11 adapter (included)

ComVerter

Some instruments (especially wall mount models) have only an infrared programmer connection. A ComVerter is required to place into the instrument's programmer bay.



Required Equipment

- ComVerter (Siemens RJ-11 to IR adapter)
- RJ-11 – equipped, two-wire, modular telephone cable (included) long enough to reach from the instrument to your computer
- 9-pin to RJ-11 adapter (included)

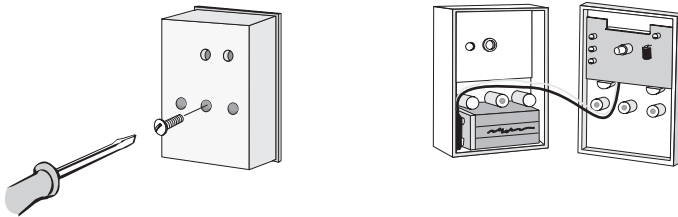
Notes:

- ComVerter goes into bay with the Siemens logo at the left.
- Press firmly to insert

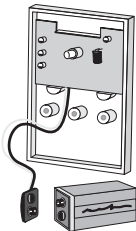
ComVerter Battery Replacement

Before changing the battery, disconnect the RJ-11 cable and remove the ComVerter from the instrument.

1. Remove screw from the back panel. and open the case.



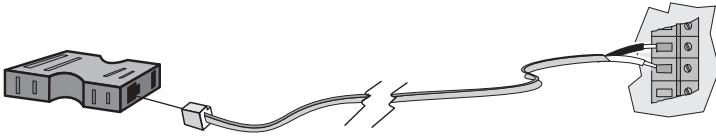
2. Replace the battery



Note: Disconnect ComVerter when not in use to conserve battery life.

Terminal Block

Some instruments that support Dolphin serial communications also have the option to connect to Dolphin Plus through the terminal block. This permanently connects your computer to the instrument or sets up a central communications area where you can plug into any instrument at the site.



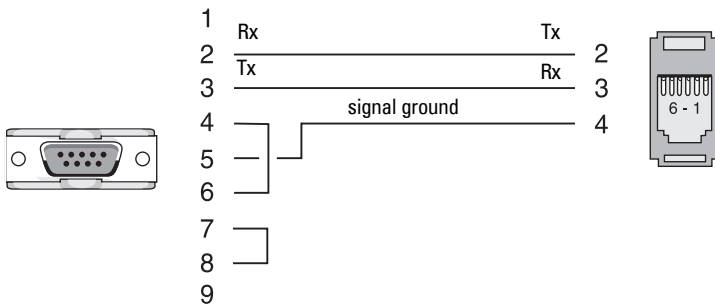
Required Equipment

- RJ-11 equipped, two-wire cable long enough to reach from the instrument to your computer
- 9-pin to RJ-11 adapter (included)

Note: See your Siemens instrument instruction manual for instructions on wiring to the terminal block.

Wiring DB-9 to RJ-11

When wiring a DB-9 (9-pin serial) connection from your computer to a RJ-11 (telephone) connection, use this wiring scheme.

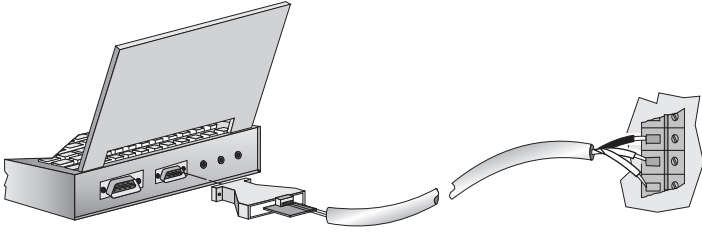


Note: Jumper 4/6 and 7/8 only if hardware flow control is set. Generally, this is not required.

- The longest run that a telephone-style cable can support is m (7 ft.).
- To achieve longer runs use twisted pair shielded cable.

RS-485 – Non Optically Isolated

To communicate with some Siemens instruments you must use the RS-485 protocol. To do this requires an RS-232 to RS-485 adapter (optional).



Only use a non-isolated adapter only on very short cable runs. This option works best with a laptop in the field. The advantage of using a non-isolated adapter is that some models will run directly from the computer's serial port and do not require an external power supply.

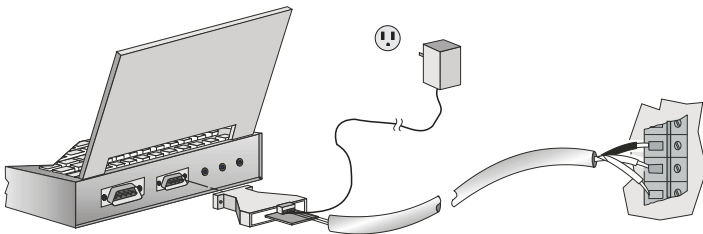
See your Siemens instrument instruction manual for instructions on wiring to the terminal block.

Contact your Siemens Milltronics representative to order this part.

Go to www.siemens.com/processautomation for a list of contacts near you.

RS-485 – Optically Isolated

To communicate with some Siemens instruments you must use the RS-485 protocol. To do this requires an RS-232 to RS-485 adapter (optional).



On longer cable runs, use an optically isolated adapter. These adapters require external power supply and so are more difficult to use with battery-powered laptops in the field.

See your Siemens instrument instruction manual for instructions on wiring to the terminal block.

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