

# Analyzers/Controllers Fieldbus connectivity

## General

Standardized fieldbus communication allows for data exchange between actual plant devices such as our controllers and analyzers and plant PLC's utilizing a number of common fieldbus protocols. Siemens Water Technologies offers well known fieldbus protocols: PROFIBUS® DP, PROFINET® IO and MODBUS® TCP fieldbus communication modules to connect to its SFC, MFC and DEPOLOX® Pool systems. For the SFC electronics, the optional fieldbus communication module is mounted inside the electronics housing and can be installed in the electronics during initial commissioning or during retrofit of existing system.

For the MFC and DEPOLOX® Pool systems, the optional fieldbus communication module is mounted externally, either in a separate enclosure or DIN rail mounted for incorporation in a control cabinet and is connected via the only RS 485 interface.

## Typical applications

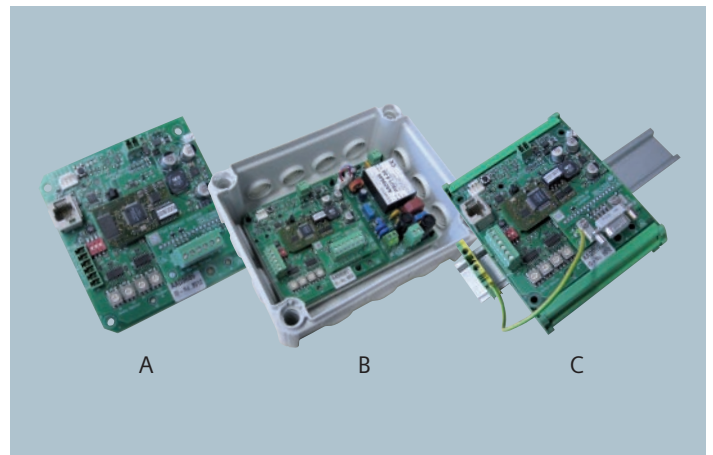
Data communication with plant PLC systems

## Available process parameters

- Measuring value with units of measure
- Status of digital inputs and relay outputs
- Application mode and alarms
- Dosing rate
- Flow rate
- Setpoint, limit values and control parameters (with read and write capability)
- Temperature

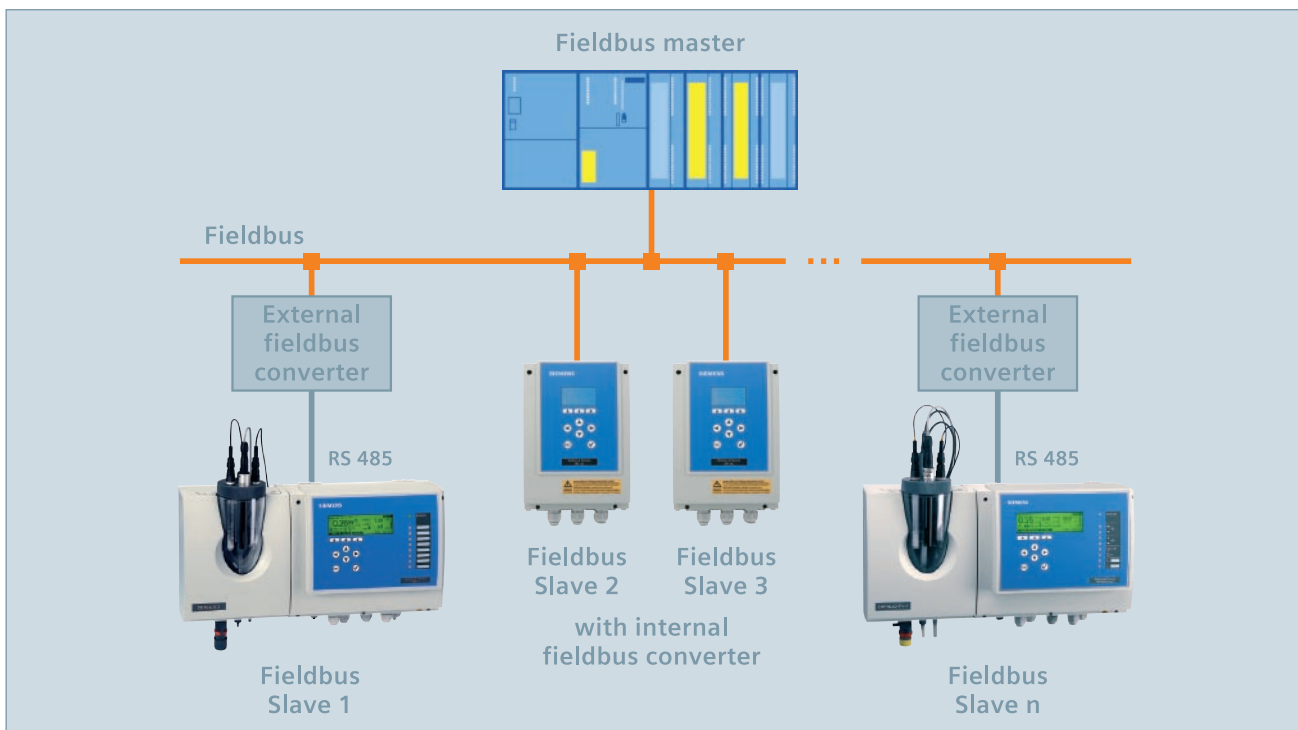
## Benefits

- Easy connection of SFC, MFC and DEPOLOX® Pool systems to proven fieldbus protocols: PROFIBUS® DP, PROFINET® IO and MODBUS® TCP
- Expanded, reliable communication: read and write capability of setpoints, limit values and control parameters
- Easy to install by Plug & Play, no wiring, no additional programming
- Easy configuration and operation via SFC, MFC and DEPOLOX® Pool system user menus
- Existing systems are easily retrofitted with optional fieldbus communication modules



The three connection types: Internal fieldbus module for SFC systems (A), external fieldbus module mounted in an enclosure (B), and mounted on a DIN rail (control cabinet installation) (C)

## Product Sheet



Depiction of a possible fieldbus installation

## Technical data

### Connection possibilities

	Internal fieldbus module	Fieldbus module with enclosure	Fieldbus with DIN rail mount
Application	SFC	MFC / DEPOLOX® Pool	MFC / DEPOLOX® Pool
RS 485 interface needed	no	yes	yes
Power supply	not required	100 – 240 VAC 50/60 Hz	24 VDC

### Fieldbus systems

	PROFIBUS® DP	PROFINET® IO	MODBUS® TCP
Transmission technology	acc. RS 485, isolated	twisted pair cable in full duplex mode, isolated	Ethernet acc. IEEE802.3 100BASE-T, isolated
Transfer rate	up to 12 MBit/s (automatic recognition)	100 MBit/s	100 MBit/s
Communication	periodic IO data exchange between DP master and DP slave(s)	PROFINET® IO periodic data exchange	supported commands: FC03: Read Multiple Registers FC16: Write Multiple Registers FC06: Write Single Register
Mode of operation	PROFIBUS® DP Slave	PROFINET® IO Device (Slave)	MODBUS® TCP Slave
Configuration	GSD file	GSDML file	access through MODBUS® register
Configurable parameters	address 0 – 126	unit name (max. 16 character)	IP address, Subnet mask, standard gateway

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