EtherNet/IP Gateway
Network Integration of Ultrasonic Flow Meters

The EtherNet/IP Gateway efficiently connects up to 12 SONOFLOW or SEMIFLOW clamp-on or inline flow meters to a PLC controller in an EtherNet-based system environment. The widely accepted EtherNet/IP protocol allows real-time communication and data exchange between the sensors and the PLC. The EtherNet/IP Gateway offers a number of standard parameters and commands, which can be selected according to the application requirements.

→ Future proof Industry 4.0 feature

→ Fast, precise and reliable real-time process monitoring and controlling

→ Maximized system uptime and yield, as well as reduced operational costs

→ Pre-configured parameters and commands for convenient implementation

→ Connection of up to 12 ultrasonic clamp-on or inline flow meters

→ Industry-wide accepted protocol

Key Features

→ Enhanced data handling and transfer

→ Pre-programmed library with Modbus registers for time-saving installation

→ Tested and approved by SONOTEC for clamp-on and inline flow meters

→ Convenient installation and configuration via browser-based interface

→ Gateway as DHCP server within an IP-based system environment

→ Signal conversion from EtherNet/IP to Modbus RTU vice versa


Featured Products

SONOFLOW CO.55

SONOFLOW IL.52

SEMIFLOW CO.65

SEMIFLOW Ex1 SET

Technical Data

Communication Connector	RJ45 (2x)
Configuration Connector	RJ45
Serial Connector	7-pin screw connector
Power Connector	3-pin screw connector
Housing Material	Plastic
Mounting	DIN rail

Storage Temperature	-40...85 °C
Operating Temperature	-25...70 °C
Power Supply	12...30 VDC
Power Consumption	Typical: 160 mA @ 24 V Max: 400 mA @ 12 V
Protection Class	IP20

Communication Principle

The SONOTEC EtherNet/IP Gateway enables communication and data exchange between up to 12 SONOFLOW or SEMIFLOW ultrasonic flow meters and an EtherNet/IP-based system (e.g., PLC). It converts the signal of a connected PLC transmitter via EtherNet/IP into Modbus RTU and the other direction.

EtherNet connection for browser-based configuration

EtherNet/IP

PLC

SONOTEC EtherNet/IP Gateway

Modbus RTU

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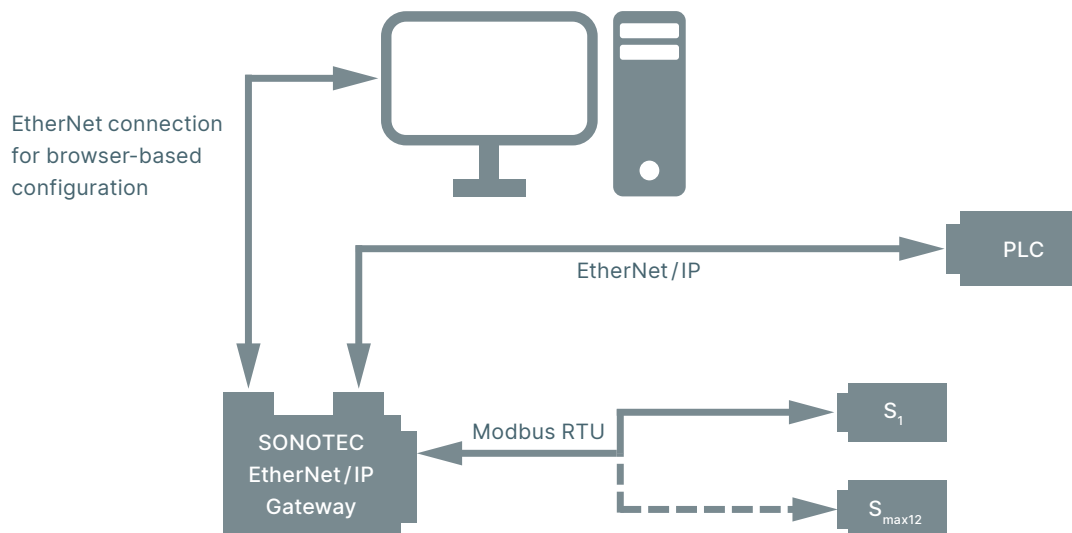
Enhanced Process Monitoring through Digital Workflows

The digital transformation can fundamentally change workflows. By connecting instruments and equipment via an EtherNet-based system, the entire work process can be operated remotely. Process engineers have a complete overview to monitor each single process step and to perform required actions. Hence, the uptime and productivity can be enhanced. Consequently, any process improvement ranging from consistent monitoring and validating to digital workflows can help to make processes more stable and increase the process quality.