GF Piping Systems

# Signet 9900 Transmitter

# Benefits

## The 9900 Transmitter offers “at-a-glance” visibility, easy set-up and the flexibility to combine it with different sensor types.

As a member of the Signet SmartPro® family of instruments, the Signet 9900 Transmitter provides a single channel interface for many different sensor types including Flow, pH/ORP, Conductivity/Resistivity, Salinity, Temperature, Pressure, Level, Dissolved Oxygen and other sensors that output a 4 to 20 mA signal. Each release of the 9900 Transmitter has included new features and capabilities in addition to the already extensive list of capabilities.


**Relay Module**


**Direct Conductivity/ Resistivity Module**


**H COMM Module**


**Batch Module**


**4 to 20 mA Output Module**


**Modbus Module**

Note: Refer to the 9900 Transmitter manual for modules supported in each generation of the 9900 Transmitters

### At-a-glance visibility

The extra-large (3.90” x 3.90”) auto-sensing back-lit display with its large characters clearly showing the primary measurement values which can be viewed at 4-5 times the distance over traditional transmitters, even in dark rooms or conditions. The 9900 with its dual line display, shows both Primary and Secondary measurement values and also comes with a separate programmable dial-type digital bar to assist in a quick visual of the applications process.

### Quick and easy installation

The intuitive menu system is consistent with GF Signet legacy product ProcessPro® and ProPoint® family of transmitters. The ¼” DIN package allows populating a control panel while reducing overcrowding. All wiring to the 9900 is installed in an easy to remove terminal to assist wiring in crowded conditions.

The 9900 will recognize GF sensors that are wired to the input terminals and assist the operator to quickly modify key parameters in the menu which are specifically required for that particular installation.

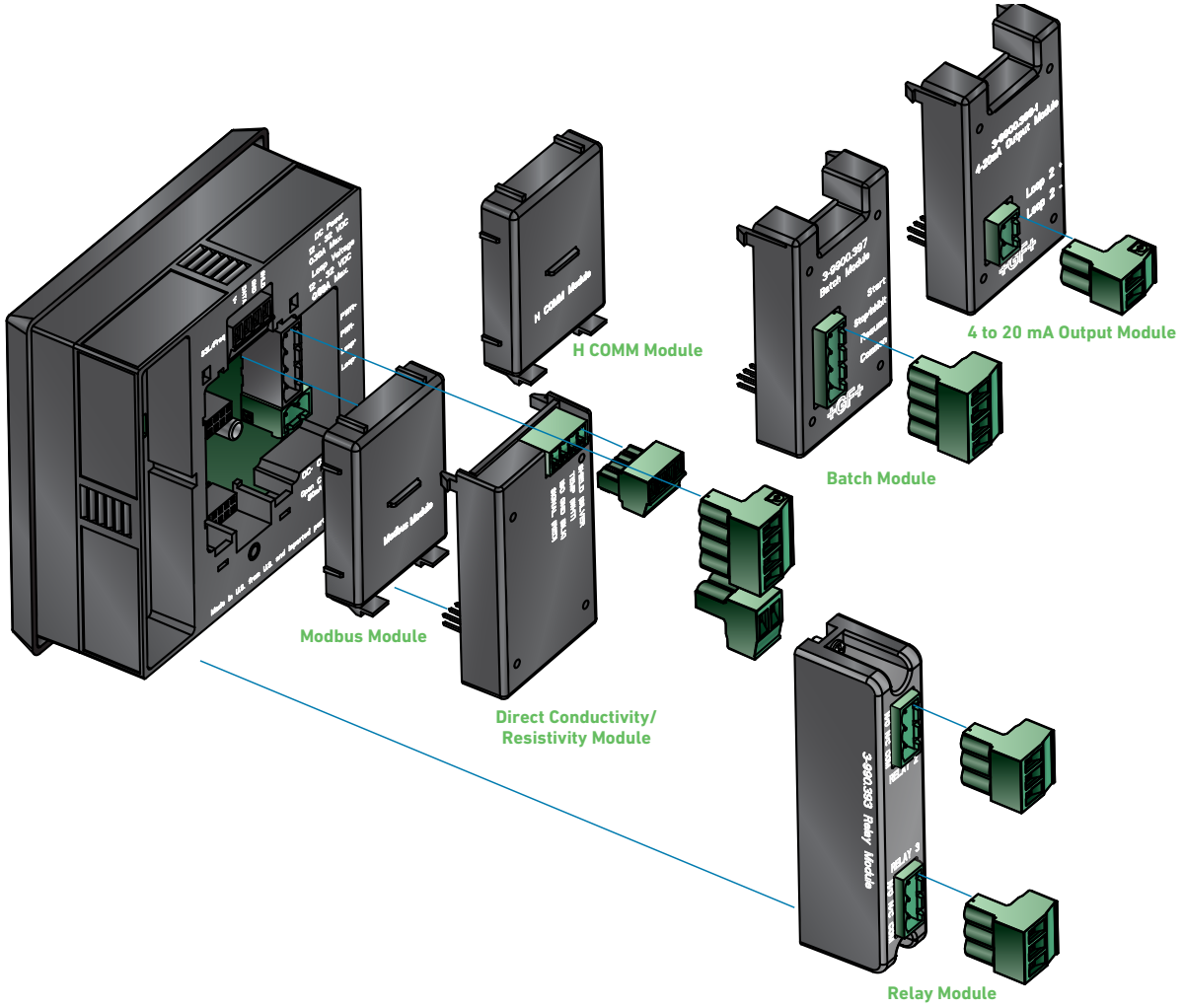
With our 0252 Configuration Tool, you can easily set-up the 9900 parameters on your laptop, clone transmitters for specific applications and save the information to a file on your laptop for future programming or to program replacement transmitters.

### Flexibility

The 9900 offers complete flexibility, plug-in modules allow the unit to easily adapt to meet changing customer needs.

Optional modules include the Modbus, Relay, Direct Conductivity/Resistivity, H COMM, Batch and 4 to 20 mA Output.

The unit can be used with default values for quick and easy programming or can be customized with labeling, adjustable minimum and maximum dial settings, and unit of measure and decimal location choices.




### Relay Module

- Adds two programmable dry-contact relays
- Hysteresis and time delay available for each relay
- Depending on the sensor type, there are a total of 23 Relay modes available

### 4 to 20 mA Output Module

- Adds one extra 4 to 20 mA output
- Output can be used for primary or secondary measurement
- Settings are independent from 4 to 20 mA output in base unit

### Direct Conductivity/Resistivity Module

- Interfaces Conductivity/Resistivity and Salinity Electrodes directly to the 9900 Transmitter
- Conductivity/Resistivity and Salinity Measurements may also be performed via the 2850 Sensor Electronics through the 9900 ($S^3L$) input

### Batch Module

- Adds Batch capability to the 9900 Transmitter (Generation II or later)
- Compatible with all Signet flow sensors
- Up to 10 batch sizes can be stored in one 9900 with customized names and K-Factors available for each batch.

### Communication Modules - Modbus Module

- Ability to transfer live readings, units of measure, and measurement status
- Connect to PLCs and SCADA Systems
- Supports the Serial Modbus RS485 standard

### H COMM Module

- Allows communication between the 9900 Transmitter and any HART® enabled device
- Allows access to Primary and Secondary measurements remotely
- Allows user to remotely adjust the 4 and 20 mA settings
- Not compatible with Batch Module

# Flexible solutions

Additional accessory options are available to help you with field installations. Thanks to the flexibility of the rear enclosure kits, you can install a 9900-1P on a wall, tank or pipe for indoor or outdoor use.

## Rear Enclosure Kit

**Hinged or Flat Cover**

The rear enclosure kit allows the 9900 Transmitter to be mounted just about anywhere. The rear enclosure kit is available in two versions. The hinged cover version is suitable for wall or pipe mount installations, and allows for easy access to the back of the 9900 Transmitter for wiring and module installation. The flat cover kit is designed to fit inside a panel for waterproof protection.

## Integral Mounted Systems

Integral mounted systems can be purchased directly from GF Signet or you can purchase the components to assemble the system yourself.

The 9900 field mount transmitter mounts onto the 3-8052 housing and can support any GF sensor with a rear ¾" NPT connector such as the 2839-2842 family of Conductivity sensors, 515/8510 and 2536/8512 Flow Integral systems, 2450 Pressure and 2350 Temperature sensors.

**Angle Adjustment Adapter Kit**

Must be used with the Direct Conductivity/Resistivity Module 3-9900.394

The angle adjustment adapter kit quickly and easily adjusts your 9900 Integral (Field) Mount Transmitter viewing angle by 25° angle. One or more angle adapters can be installed together, which can also provide extra room for the wiring.

# Benefits of field mount kits

What makes the 9900 rear enclosure so flexible, is that you can convert the panel version of the 9900 Transmitter into a field mountable transmitter. The design feature make it suitable for installations onto walls, pipes, struts or inside panels.

- Compatible with all existing 9900-1P Transmitters
- NEMA TYPE 4X/IP66 rated for indoor or outdoor installations
- Spacious for any 9900 Transmitter accessory module
- Drill holes on any side for flexible wiring orientation.

# Applications

## The 9900 Transmitter in a tank filling application.

The 9900 versatile parameter and modularity capabilities make the unit well suited for a variety of applications including wastewater treatment, reverse osmosis, deionization, chemical manufacturing, metal and plastic finishing, fume scrubbers, cooling towers and media filtration.

# Applications

## No matter which processes and applications – GF Piping Systems supports its customers in every phase of the project.

From start to finish, we stand beside our customers as a competent, reliable and experienced partner, actively contributing the know-how of an industrial company that has been successful in the market for over 200 years. With our application knowledge and product expertise we support our customers during the planning process, the sustainable realization of the projects and the provision of services.

**Industrial & Municipal Water Treatment**

Water treatment, whether it is for municipal or industrial applications, typically serves to improve the quality of the water to ensure public safety or to reduce negative impacts on process equipment and/or the environment. The 9900 Transmitter, part of the SmartPro family, is ideal for use in measurement and control of various water treatment applications. Industrial Water Treatment applications include media filtration, deionization, desalination, cooling tower control, reverse osmosis, and fume scrubbers, while chlorine dioxide and ozone control are common in Municipal Water Treatment applications. Monitoring the quantity and quality of various parameters such as acidity/alkalinity of chemicals, salts, and chlorine concentrations are all important in delivering processed water to the quality standards demanded by each unique application.

**Chemical Process Industry**

The 9900 and applicable sensors can be used for measurement and control in the transport and dilution of various chemicals. Managing chemical tank levels and dosing of chemicals can all be monitored and controlled using the 9900 Transmitter.

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# Local support around the world

Visit our webpage to get in touch with your local specialist:
**www.gfps.com/our-locations**



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