

+GF+ SIGNET 5900 ProPoint™ Salinity Monitor



Description

The +GF+ SIGNET 5900 Salinity Monitor utilizes conductivity sensors to provide direct reading, including calibration, of salinity in parts per thousand (PPT). Equipped with a scaleable 4 to 20 mA output and two programmable relays, the monitor requires 12 to 24 Volts, AC or DC, and can be used with +GF+ SIGNET 2822 and 2823 Conductivity Electrodes (10.0 and 20.0 cell constants, resp.) Temperature is selectable for

display in either °C or °F, and compensation is automatic. Calibration is simplified with single-point salinity and temperature entry via the wet-cal menu sequence. The four-button keypad arrangement with intuitive software design is user-friendly, and the NEMA 4X/IP65 integrity of the front panel can be extended to the entire enclosure by using the optional Rear Cover Kit.

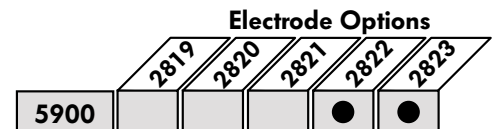
Features

- Direct reading and calibration in PPT
- Temperature Compensation
- Two Programmable Relays
- Dual Proportional Control Capability
- Scaleable 4 to 20 mA Output (active)
- Tamper-proof Security Code
- Analog and Digital display
- Backlit LCD
- Simple push-button operation
- Intuitive Software Design
- Non-volatile memory
- Versatile low voltage power requirement
- 1/4 DIN, NEMA 4X/IP65 enclosure
- Hard-coated, High Impact & UV resistant polycarbonate front face

Application

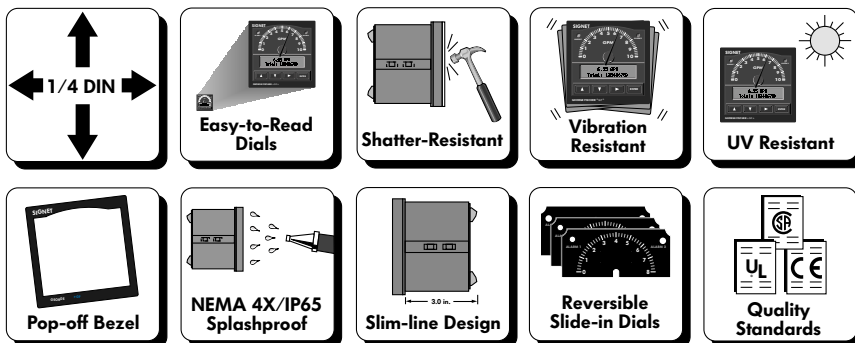
- Desalinization
- Saltwater Production
- Aquatic Animal Life Support Systems
- Aquaculture
- Environmental Studies

Options



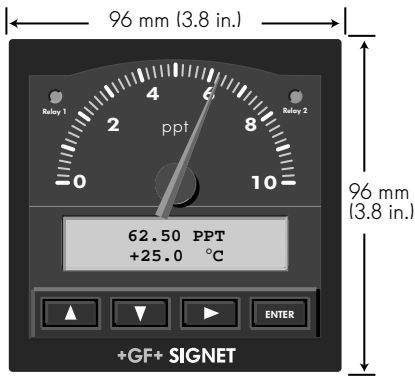
Technical Features

Pro-Point Family Features

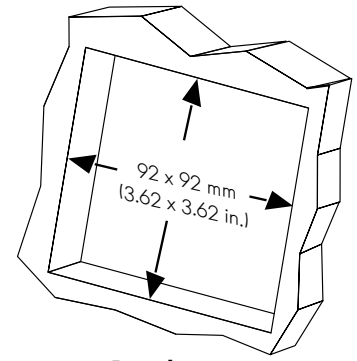
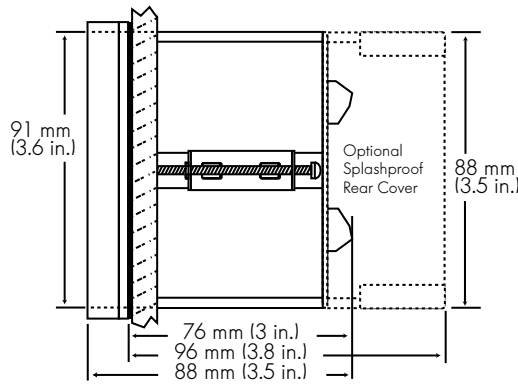


Dimensions

Front View

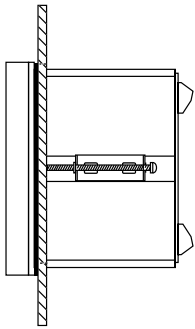


Side View

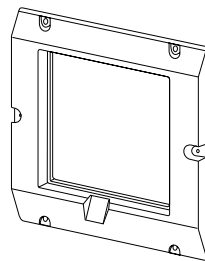


Panel cutout

Installation

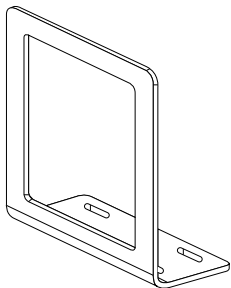


- Panel mount (standard)

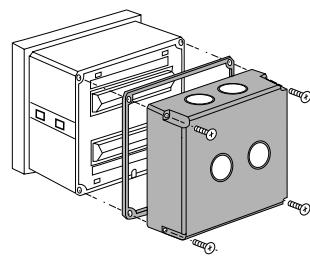


- Optional 5x5 inch adapter plate for SIGNET retrofit (3-5000.399)

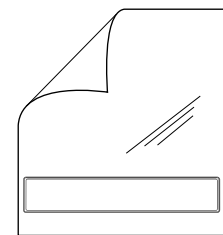
- Front panel provides NEMA 4X/IP65 splashproof protection
- Standard 1/4 DIN panel cutout
- 76 mm (3 in.) mounting depth including rear terminals
- Optional splashproof rear cover kit with knockout ports for cable access
- 96 mm (3.8 in.) mounting depth with optional splashproof rear cover installed



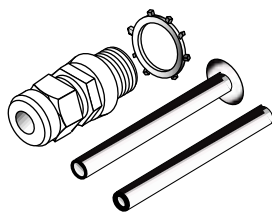
- Optional surface mounting bracket (3-5000.598)



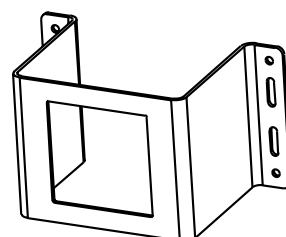
- Optional splashproof rear cover kit (3-5000.395)



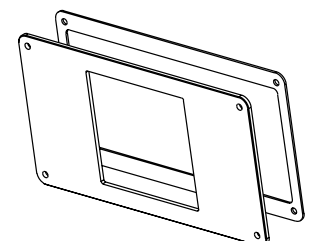
- Protective Overlay kit (10 pcs) (3-5000.398)



- Liquid Tight Connector Kit - 3 sets per kit (3-9000.392 - 3 sets per kit) (3-9000.392-1 - 1 set per kit)

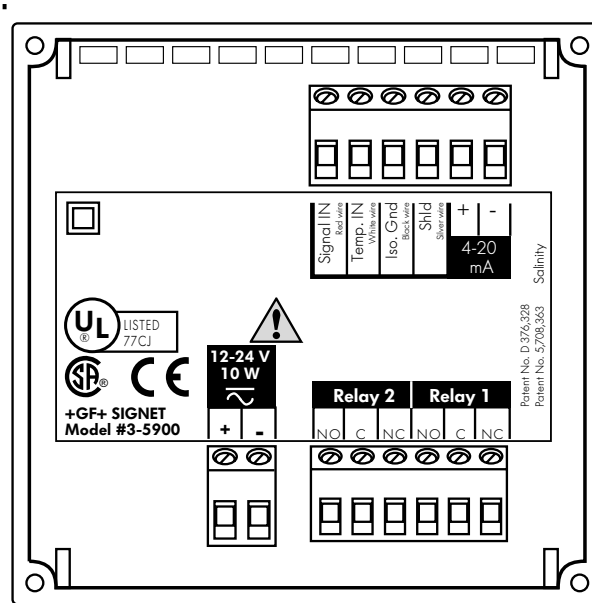


- Optional heavy duty wall mount bracket (3-0000.596)



- Optional 200 retrofit adapter (3-8050.392)

Rear Terminal View



Technical Data

General

Operating Range:	Salinity: 1 to 80 ppt (parts per thousand) Temperature: -5° to 100°C (23° to 212°F)
Power Requirements:	12 to 24 Volts, AC or DC, unregulated, 50 to 60 Hz, 10W max.
Display:	Analog: Reversible dials: 0 to 2, 4, 6, 8, 10 and 100 Digital: Backlit LCD, 2x16 alphanumeric character
Current Output:	4 to 20mA, non-isolated, internally powered (active) Loop impedance: 350Ωmax. @ 12V, 950Ω max. @ 24V Accuracy: +/- 0.1%
Alarm Contacts:	Two SPDT relays: 5A @ 30VDC, 5A 125VAC, or 3A @ 250VAC max. High/Low/Pulse programmable with adjustable hysteresis Dual proportional control capability, up to 300 pulses per minute
Accuracy:	± 2% of reading
Materials:	Enclosure: ABS Plastic, NEMA 4X/IP65 Keypad: Silicone Rubber Panel and case gasket: Neoprene Window: Hard-coated polycarbonate
Shipping Weight:	0.8 kg (1.76 lb.)

Environmental

Operating temperature:	-10° to 55°C (14° to 131°F)
Relative humidity:	0 to 95%, non-condensing

Standards and Approvals

- CE, CSA, UL
- Immunity: EN50082-2
- Emissions: EN55011
- Safety: EN61010-1
- Manufactured under ISO 9001 and ISO 14001

Description

Mfr. Part No.

3-5900

Code

198 825 008

Description

5900 Salinity Monitor

Reversible dial-face kit included (0-2, 4, 6, 8, 10 and 100)

Accessories

Mfr. Part No.

3-5000.395

3-5000.598

3-5000.399

3-9000.392

3-9000.392-1

3-9000.392-2

3-8050.392

3-0000.596

3-5000.390

3-5000.397

3-5000.525-1

3-5500.390

3-5500.612

3-5000.398

3-8050.396

Code

198 840 227

198 840 225

198 840 224

159 000 368

159 000 839

159 000 841

159 000 640

159 000 641

159 000 323

159 000 326

198 840 226

159 000 347

198 840 230

159 000 646

159 000 617

Description

Splashproof Rear Cover Kit (NEMA 4X/IP65)

Mounting Bracket

Retrofit Adapter Kit for rear

Liquid tight connector kit for rear cover (includes 3 connectors)

Liquid tight connector kit, NPT (1 piece)

Liquid tight connector kit, PG13.5 (1 piece)

Model 200 retrofit adapter

Heavy duty wall mount bracket

Installation kit

5000 series window kit

Bezel, 5000 series

Dial kit

Unit tags

Protective Overlay kit (10 pcs)

RC Filter kit (for relay use)

Engineering Specifications

- The salinity monitor shall meet appropriate CSA, UL and CE standards, including EN50082-2 requirements for electromagnetic immunity, EN55011 requirements for electromagnetic emissions, and EN61010-1 for safety.
- The salinity monitor front panel shall be sealed to NEMA 4X/IP65.
- The salinity monitor shall be manufactured under ISO 9001 and ISO 14001 certified processes.
- The salinity monitor input shall accommodate signals from conductivity electrodes with cell constants of 10.0 or 20.0, which correspond to readings of 0 to 80 parts per thousand.
- The salinity monitor shall provide automatic temperature compensation.
- The salinity monitor shall be equipped with both analog and digital displays.
- The digital display shall be a backlit LCD.
- The salinity monitor shall provide a scaleable 4 to 20 mA output and two programmable SPDT relays.
- The salinity monitor accuracy shall be $\pm 2\%$ of reading.
- The salinity monitor shall be +GF+ SIGNE 5900 Salinity Monitor.