

CAPACITANCE MEASUREMENT



InteliSENS™ CG Series Capacitance Gauges

Proton InteliSENS™ CG Series capacitance gauges are for continuous measurement of insulation capacitance on cable extrusion lines. The CG Series enables manufacturers to control the stability of the capacitive characteristics of their cable insulation.

The rugged, compact and durable design, multiple communications options, and easy integration with other systems make the CG Series an excellent, economical choice. The cable runs through the CG capacitance gauge head which is connected to the InteliSENS™ signal processor unit which analyses the capacitance measurement through an advanced auto balancing bridge system, with sophisticated FPGA processing to ensure drift-free capacitance measurement. Integral fixing holes provide versatile mounting options, and the CG gauge head can be used either submerged in a

cooling trough or within spray-water area cooling troughs. For high-speed lines, the gauge head can be connected to a high-pressure water supply.

The CG Series gauge head is supplied with an IP65 rated InteliSENS™ signal processing unit (CAP interface box) and a 1.5 metre-long industrial interconnection cable. On PLC controlled or computerised lines the

CAP interface box can communicate directly via RS232/USB or Profibus. Additional interfacing including DeviceNET TM is available upon request.

For more conventional set-ups, we supply a CS2G-CAP indicator and control unit with twin LED Displays, and a range of operator presets complementary outputs. The CS2G-CAP interfaces with the InteliSENS $^{\text{TM}}$ CAP interface box through CANbus. Various lengths of interconnection cables can be supplied.

CHARACTERISTICS



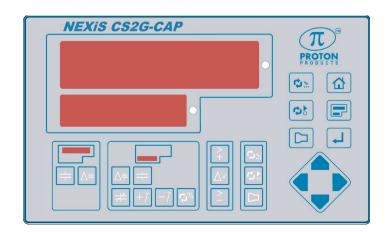






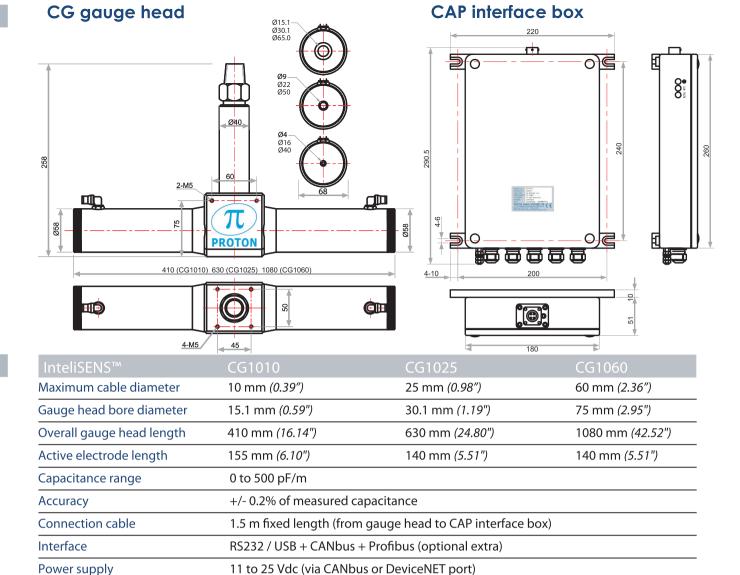
RS232 / USB

CS2G-CAP DISPLAY AND CONTROL UNIT

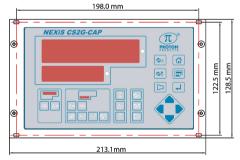


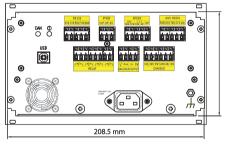
BENEFITS

- High accuracy, from low to high speeds
- Low drift
- Zero correction function
- Rapid installation
- Unaffected by air bubbles, water temperature, resistivity or pH values
- Range of interfaces for PLC & computers
- Maintenance free system
- IP65 protection
- Direct replacement for old, worn and cumbersome capacitance measuring equipment.

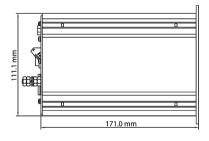


NEXiSTM CS2G-CAP: connected to CAP interface box via CANbus





5.8 kg (Gauge head); 2.5 kg (CAP interface box)



The NEXiS[™] CS2G-CAP is a production line control system for use with the CG Series capacitance gauges. The CS2G-CAP outputs control data to production equipment, ensuring preset limits are not exceeded. The system is ideal for cable insulation, jacketing, tubing and many other applications. The CS2G-CAP has a 2-row LED display and membrane control panel, as well as 4 relay outputs, 2 analogue outputs, and USB, RS232 and CANbus connectivity, and features independent tolerance settings, shrinkage setting, alarm functions, and line speed input. See the separate NEXiS[™] CS2G datasheet for full details.

CONTACT **HEAD OFFICE**

Weight

Proton Products International Ltd. 10 Aylesbury End, Beaconsfield, Buckinghamshire, HP9 1LW, **ENGLAND** info@protonproducts.com

www.protonproducts.com

EUROPE

Proton Products Europe N.V. Nieuwbaan 81, B-1785, Merchtem-Peizegem, BELGIUM.

Tel +32 (0) 52 466 311 Fax: +32 (0) 52 466 313

USA

Weber & Scher, P.O. Box 366, 1231 US Highway 22 East, Lebanon Borough, New Jersey, USA.

Tel +1 (908) 236 8484, Fax +1 (908) 236 7001

ASIA

Proton Products Chengdu Ltd 126 East 2nd section, 1st Ring Rd. Chengdu, 610051, CHINA. Tel +86 288 439 3112.

Fax +86 288 437 0880