

PGC5000 Series gas chromatographs

PGC5000A Generation 2 master controller



The new standard in industrial gas chromatographs

Measurement made easy

Overview

The PGC5000A Generation 2 master controller provides all analyzer system control functions and coordinates internal and external data activities for all of the PGC5000 Series ovens. The new controller also supports multiple smart oven configurations to maximize application flexibility while minimizing space and utility requirements. The Generation 2 controller is designed with a Real Time (embedded) Operating System (RTOS) to guarantee critical system uptime, security and deterministic transfer of data. The Human Machine Interface (HMI) includes a 10.4 inch true color touchscreen SVGA display, universal keypad and touch-pad mouse.

Features

Ease of use

- Graphics based touch screen HMI

Multiple configurations

- Supports multiple Smart Oven™ configurations,
- Up to 4 PGC5000B ovens
- Up to 2 PGC5000C ovens
- One PGC5000C with up to 2 PGC5000B ovens

Communication interfaces

- Ethernet, OPC, MODBUS, 4 to 20mA analog outputs, VistaNET 2.0 compatible

Enhanced Data Storage

- Up to 7 days of chromatograms and reports via removable SSD card

Standard inputs / outputs

- Eight isolated 4 to 20mA outputs
 - Four digital outputs
 - Dedicated purge alarm
 - Dedicated common malfunction alarm
- Two additional configurable outputs

Application flexibility

- PGC5000B Smart Ovens target basic applications with a fixed set of features
- PGC5000C Smart Ovens target complex applications requiring multiple detectors for high application density
- PGC5007 oven targets flare gas monitoring and total sulfur process applications
- PGC5009 oven designed for fast temperature programmed simulated distillation analysis

Specification

Master controller

Environmental (enclosure)

Protected from weather
IP 54, (NEMA 3 equivalent)

Ambient temperature range

0 to 50° C (32 to 122° F)

Humidity

95% relative humidity, non-condensing

Dimensions (W x D x H)

596.9 mm x 419.1 mm x 256.5 mm
(23.5 in. x 16.5 in. x 10.1 in.)

Weight

20 kg (44 lbs) (minimum, configuration dependent)

Mounting

Wall: 33 mm (1.3 in.) from wall with brackets

Floor

Optional dolly with casters

EMI / RFI considerations

Conform to class A industrial environment

Electrical entries

Top

Safety area classification

CSA / NRTL

Class I, Division 1; gas groups B, C, D with type Y-purge
Class I, Division 2; gas groups B, C, D Temperature Code T4

ATEX / IECEx/ CN / KO

Zone 1: CE; II2G, Ex ib py IIB+H2 T4 Gb
Zone 2: CE; II3G Ex nA IIB+H2 T4 Gb

CU TR: INMETRO

Optional X-purge power interlock Ex d ib px IIB+H2 T4

Purge wait time

18.2 minutes (Class I, Division 1 / Zone 1 area)
(hot, neutral, ground)

Power (hot, neutral, ground)

Voltage: 100 to 240 VAC
Frequency: 50 to 60 Hz
Power consumption: 120 VA startup and steady-state
operation (variable with installed options)

Instrument air

Supply connection: ¼ inch tube, minimum
Supply pressure: 414 kPa (60 psig) minimum
Quality: Clean, oil free and -34° C, (-30° F) dew point
Instrument grade:
Flow rates – steady state purge
2 to 25 l / min (0.75 to 0.78 ft³ / min) at 20° C,
Y-purge types

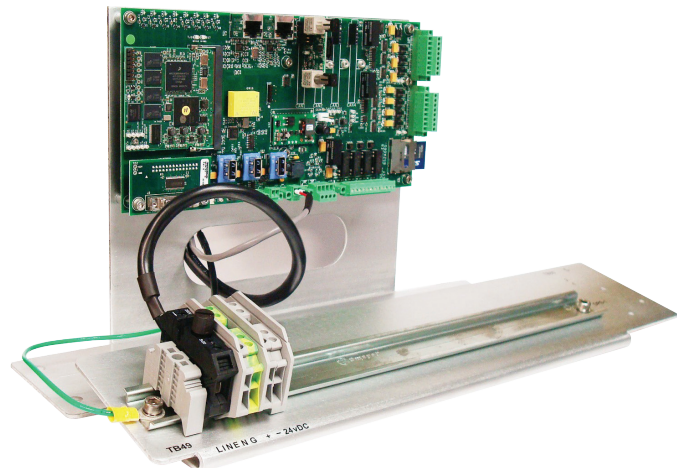
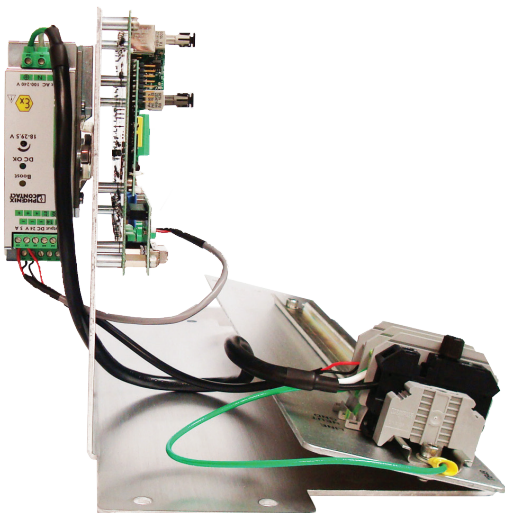


Figure 1 Generation 2 master controller

Trademarks

Ethernet is a registered trademark of Ethernet, LLC

OPC is a registered trademark of OPC Foundation

Modbus is a registered trademark of Schneider Automation

Sales



Service



Software



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