



SuperSystems
Incorporated

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21.83%
0.744%
5.92%

Portable Gas Analyzer

SSi
SUPER SYSTEMS INC.
MADE IN U.S.A.
GOLD PROBE
U.S. PAT. NO. 5,624,424

SSi Super Systems
0.45
0.45
1092
V A
PSI LB
ACAM



SuperSystems



Gold Probes

Furnace Calculator App



Probe/IR Carbon Calculator



GOLD PROBE™

- Patented design delivers accuracy and repeatability
- Engineered to be rebuilt for 50% of list price
- Rebuilds include 12-month warranty from installation
- State-of-the-art probe design features high velocity burn-out
- Carbon Potential, Dew Point, Oxygen
- Typical thermocouples: "S", "R", "K" and "N"
- Cermet coating and ceramic sheath optional
- Installed directly in the hot zone



BAZOOKA

- Specifically designed to control endothermic generators
- Used on rotary and muffle furnaces, or any furnace with a retort
- Installed in combustion chamber
- Integral sample well
- Operates at 1500 - 1600 °F (816 - 871 °C) for optimum life

HP15 / HP2000 Self-Heated Gold Probes

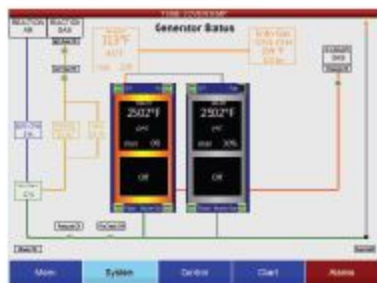
- Engineered for rotary, shaker, pit furnaces and modular endothermic generator applications
- Low-temperature protective atmosphere applications
- External sample applications when in-situ probe is difficult to install

PROBE CONDITIONING

- Single or multi-zone burnoff and reference air



AutoGen



GENERATOR CONTROL

Sophisticated flow loop algorithms provide demand-based control on endothermic gas generators. Fully automated generator control including temperature, dew point, air/gas flow, and automatic turndown.

- Temperature Control Loop(s)
- Dew Point Control (Multiple Technologies)
- 12.1" Color Touch Screen (15" Optional)
- Data Recording
- Current & Historical Alarm Information
- Ethernet Connectivity
- Includes air blower, VFD, air filter assembly, gas flow valves, pressure transducers





Controllers

Single-Loop Controllers

- Designed specifically for atmosphere and temperature control
- Temperature, %Carbon, Dew Point, O_2 , and Millivolts
- Internal timers for burn-out/probe maintenance
- On-board probe diagnostics
- RS485, Modbus communication protocol
- Built-in dwell and soak timers
- High Limit FM approved
- 1/4, 1/8, 1/16 DIN sizes; UL, CE approved



Instrumentation

- Data recording/trend display - real-time and historical datalogging
- PID Control output, with multi-point auto-tuning
- Touch screen operator interface
- Ethernet (Modbus TCP/IP), RS485
- Heat Treat Recipes, Step or Segment
- Multizone capable with expandable I/O
- Load TC Module for TC display and datalogging
- Guarantee soak on control and load TCs



Compact HMI



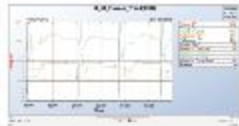
Modular with expandable I/O

Furnace and Oven Control

Atmosphere



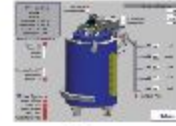
- Percent Carbon and Temperature Control
- Built-In Quench Control Timer
- Probe Conditioning and History



Gas Nitriding / FNC



- Automated Back Pressure Control
- Automated Single and Two Stage Processes
- Control of %DA, K_C and K_N



Vacuum



- Overshoot Suppression
- Direct Connection to Vacuum Gauge
- Multiple PID Sets with Switch Points
- Digital Zone Trimming



PC Configurator - Remote Controller Management

- When using PC and Configurator Software, touch screen operator becomes optional
- Configure outputs, alarms, PID tuning, and parameters
- Create, modify, start and stop recipes
- Backup and restore configuration



TS Manager

Data management for touch screen flashcard. Remote data viewer, remote screen control, historical data backup, SuperDATA integration



Analyzers

PGA3510 / MGA6010 Portable IR Analyzers

- 3-Gas NDIR (CO, CO₂, CH₄)
- O₂ cell, optional H₂ cell
- Software for data archiving
- Carbon calculation using 3 gases and temperature
- Portable, battery powered (rechargeable)
- Ethernet communications
- Multi-language
- User-defined equipment list
- Sessions for equipment data logging
- Ammonia capability option



Single Gas Modules

- CO, CO₂, CH₄, and H₂/O₂ Modules
- Ethernet Flash RS-485 communications
- Analog Outputs



DP2000 / DPC2530 Dew Point Analyzers

- Range: 0 to 80 °F (-18 to 27 °C)
- Digital display degrees: °F or °C
- DP2000 - Operator friendly, battery powered
- DPC2530 - Permanent, AC power, control/alarm



DPC3500/DPL4000 Low Range Dew Point Analyzers

- Range: -148 to 20 °F (-100 to -7 °C)
- Designed for Nitrogen, Argon, Hydrogen gases
- Digital display degrees: °F or °C
- DPL 4000 - portable battery powered
- DPC 3500 - continuous



Hydrogen Analyzer

- Range: -148 to 20 °F (-100 to -7 °C)
- Designed for Nitriding/FNC
- K_N, %DA, H₂ Readings

Carbon Analyzer (CAT-100)

- Precise Carbon Measurement
- Range: 0.1 to 1.3% Carbon
- Math/Calculation Free





Flow Meters

SSI factory calibrated Gas Flow Meters are designed specifically for heat treating applications.

The eFlo Meter provides digital readout and controls gas flow electronically. It includes automatic flow control capabilities, flow totalizer, Modbus RTU and ethernet digital communications, alarm output, and analog output.

The Gauge Meter Analog Flow Meter uses differential pressure technology to accurately display gas flow for the harshest industrial environments with no power requirement.

Custom flow racks designed for every application.

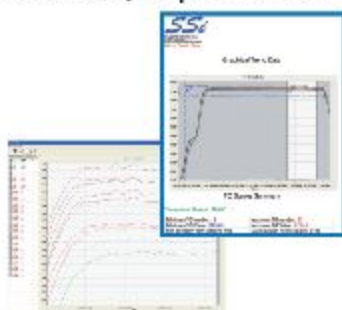


Multi-Channel Data Logger

SDS8120 / SDS8140 provides the hardware and software needed to meet industry standards for **temperature uniformity surveys** by logging and generating reports that address the **AMS 2750** and **CQI-9** specifications.

Portable Data Logger

The portable and rugged data logger is easy to use and addresses the many industrial applications where logging, trending, and reporting are required. The product is available in either the 20 or 40 channel version with user-defined inputs for each channel.



Specifications

- Color Touch Screen
- Built for Industrial environments
- Designed specifically for temperature uniformity surveys
- Approximately 12 hours of battery life
- USB connection to PC
- Customized reporting tools

Video Recorder

Features:

- 3 screen options: 3.5", 5.7", 12.1" screens
- Universal Analog inputs - fully isolated, up to 48 inputs available
- Handwritten notes capability
- DIN rail mountable base and slim operator interface
- Redundant data storage
- Remote connectivity
- VR manager for remote data access
- Satellite analog base units allow for flexible integration
- Extended I/O module available with 8 outputs and 4 inputs
- AMS 2750 Compliant
- Modbus master communications for slave instrument datalogging



