sauermann®

NEW!

HVACR COMBUSTION & INSTRUMENTATION

Residential, Commercial & Industrial Applications

www.sauermann.us / www.e-inst.com

Table of contents

Product Overview

Combustion gas analyzers

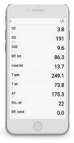
E1500

Si-CA 120

E4500

Combustion Analysis
Draft
CO Measurement
Heat Exchanger Test
Temperature
Pressure
Emissions Measurement
NO_x Testing

E500



PC and mobile Applications

Bluetooth®

ANDROID APP ON Google play

Download on the App Store

Sauermann offers a complete range of innovative instrumentation solutions encompassing Combustion Gas Analyzers, Emissions Analyzers, Gas Leak detection and Indoor Air Quality designed and built for the residential, commercial, power, process, industrial, institutional, IAQ, and HVAC markets the HVAC Professional with Quality in Mind. Customer Support and Applications expertise are fundamental to Sauermann's success in providing high quality combustion gas analyzers.

Combustion gas analyzers

Residential, Commercial & Industrial Applications

Robust, ergonomic & compact, the Combustion Analyzers are easy-to-use. Their all-in-one functions: Combustion Gas Analysis, Emissions Measurements, Draft, Pressure, Differential Temperature, Ambient CO monitoring, and Heat Exchanger test make them the ideal tool for any HVAC Technician in any application.

The range includes four instruments allowing measurements of many gases including: O_2, CO, CO_2, NO, NO_x, NO_2, SO_2 and CxHy.

Mobile applications are available for both IOS & Android, and all devices have Bluetooth® function.

O_2, CO, NO, (NO_x)
NO_2, SO_2, CxHy

Field Replaceable Sensors
Sensors Diagnostic

Built-In Printer
(E1500)

Automatic, True High Efficiency Calculations for All Condensing Systems

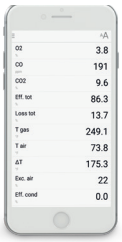
Full Color Graphic Display

iOS and Android Mobile Applications

Optional wireless Bluetooth® printer (E500 & Si-CA120)

Long Lasting Rechargeable Battery & AC Charger

Automatic PC Software with Bluetooth®



Applications

Windows PC and mobile (iOS & Android)

Mobile

- Real-time data reading
- Data logging
- Reports creation
- Si-CA QR Code app
- Email reports from the jobsite
- Real Time Bluetooth® or QR Code Apps Available

PC

- Instrument Data Identification Display
- Analyzer Configuration
- Remote Display of Real-Time Analysis from the Portable Analyzer and Automatic Data Saving
- Display and/or Exportation or Deletion of Stored Analysis

ANDROID APP ON Google play

Download on the App Store

Bluetooth®

Residential HVAC

Combustion Analyzers Selection Guide

NEW!

500-1

500-2

500-2P

Si-CA-120

1500-1

Parameters

	500-1	500-2	500-2P	Si-CA-120	1500-1
O_2 Measurement, 0 - 25.0%	✓	✓	✓	✓	✓
CO_2 (Calculated from O_2), 0 - 100%	✓	✓	✓	✓	✓
CO Measurement w/ NOx Filter, 0 - 4,000 ppm	✓	✓	✓	-	-
CO Measurement w/ NOx Filter, 0 - 8,000 ppm	-	-	-	✓	✓
Calculated Combustion Efficiency	✓	✓	✓	✓	✓
Ambient Temperature Measurement	✓	✓	✓	✓	✓
Stack Temperature Measurement	✓	✓	✓	✓	✓
Differential Pressure Manometer	✓	✓	✓	✓	✓
Draft Measurement	✓	✓	✓	✓	✓
Excess Air Measurement	✓	✓	✓	✓	✓
Ambient CO Monitor	✓	✓	✓	✓	✓

Features

	500-1	500-2	500-2P	Si-CA-120	1500-1
Built-In Printer (Non-Fading Paper)	-	-	-	-	✓
Wireless Bluetooth® Printer	-	Optional	✓	Optional	-
FIELD-REPLACEABLE Pre-Calibrated Sensors	✓	✓	✓	✓	✓
Mobile App	-	✓	✓	✓	✓
PC Software & USB Cable	-	-	-	✓	✓
Combustion Efficiency Measurements For All Atmospheric & Condensing Systems	✓	✓	✓	✓	✓
Internal Memory (# of Tests)	5	5	5	2,000	2,000
Rechargeable Battery w/ AC Charger	✓	✓	✓	✓	✓
Display Screen	One Color	One Color	One Color	Multicolor	Multicolor
Carrying Case	ABS	ABS	ABS	Vinyl/ABS	Vinyl/ABS

Commercial HVAC

Combustion Analyzers Selection Guide

NEW!

Si-CA-120

1500-1

500-3

500-3P

4500-3

4500-4

Parameters

	Si-CA-120	1500-1	500-3	500-3P	4500-3	4500-4
# of Gases	2	2	2-3	2-3	3-4	4
O_2 Measurement, 0 - 25.0%	✓	✓	✓	✓	✓	✓
CO_2 (Calculated from O_2), 0 - 100%	✓	✓	✓	✓	✓	✓
CO Sensor w/ NOx Filter, 0 - 8,000 ppm	✓	✓	✓	✓	✓	✓
CO Auto Dilution (0 - 10%) High Range	-	-	-	-	✓	✓
NO/NOx Sensor 0 - 5,000 ppm	-	-	✓	✓	✓	✓
TOTAL NOx ($NO + NO_2$ Included)	-	-	-	-	✓	✓
Low NOx Sensor 0 - 100.0 ppm	-	-	-	-	✓	✓
Combustion Efficiency & Losses	✓	✓	✓	✓	✓	✓
Ambient Temperature Measurement	✓	✓	✓	✓	✓	✓
Stack Temperature Measurement	✓	✓	✓	✓	✓	✓
Differential Pressure Manometer	✓	✓	✓	✓	✓	✓
Draft Measurement	✓	✓	✓	✓	✓	✓
Excess Air Measurement	✓	✓	✓	✓	✓	✓
Ambient CO Monitor	✓	✓	✓	✓	✓	✓

Features

BUILT-IN Printer (Non-Fading Paper)	-	✓	-	-	✓	✓
Wireless Bluetooth® Printer	Optional	-	Optional	✓	-	-
FIELD-REPLACEABLE Pre-Calibrated Sensors	✓	✓	✓	✓	✓	✓
Mobile App	✓	✓	✓	✓	✓	✓
PC Software & USB Cable & Bluetooth®	✓	✓	-	-	✓	✓
Automatic Data Logging	-	-	-	-	✓	✓
Combustion Efficiency Measurements For All Atmospheric & Condensing Systems	✓	✓	✓	✓	✓	✓
Internal Memory (# of Tests)	2,000	2,000	5	5	2,000	2,000
Rechargeable Battery w/ AC Charger	✓	✓	✓	✓	✓	✓
Display Screen	Multicolor	Multicolor	Single color	Single color	Multicolor	Multicolor

Combustion analyzers

Gas analysis / Temperature / Pressure

- 6 Tools-In-One
- Flue and Ambient Temp
- Ambient CO Monitor
- Built-In Manometer
- Combustion Efficiency
- Draft & Pressure
- Smartphone Apps
- High Altitude Adjustment

NEW!

ECONOMICAL

E500

- Economical & easy to use
- iOS and Android mobile apps
- True high-efficiency calculations for all condensing systems

O_2, CO, CO_2,
(Optional NO, NOx)

COMPACT

Si-CA-120

- Field replaceable sensors
- iOS and Adroid mobile apps
- Auto-zero in the flue
- Automatic true high-efficiency calculations for all condensing systems

O_2, CO, CO_2

ESSENTIAL

All-In-One E1500

- Built-in non-fading printer
- Field replaceable sensors
- iOS and Android mobile apps
- Automatic true high-efficiency calculations for all condensing systems

O_2, CO, CO_2

O_2 | CO | CO_2 | NO_x | NO_2 | SO_2

EMISSIONS

E4500

- Built-in non-fading printer
- Up-to four (4) gases: O_2, CO, NO_x, SO_2, NO_2, C_xH_y
- Total NOx capable
- Upgradeable to add more gases
- Dilution Pump for CO Auto-Range Measurement up to 100,000 ppm
- Combustion efficiency

O_2, CO, NO, NO_2, SO_2, CxHy (HC)

CO MONITOR

CO50

- CO and temperature
- Built-in probe
- 2-Line display
- 20 min auto shut-off
- 0 to 500 ppm CO

GAS SNIFFER

7899

- Auto zero-drift adjustment
- Visual and audible alarms
- LCD and bar graph display
- 0 to 10,000 ppm CH4
- 11″ flexible probe

APP

Si-CA Mobile App

- Real-time data reading
- Data logging
- Reports creation
- Si-CA QR Code app
- Email reports from the jobsite
- Real Time Bluetooth or QR Code Apps Available

SOFTWARE

PC

- Instrument Data Identification Display
- Analyzer Configuration
- Remote Display of Real-Time Analysis from the Portable Analyzer and Data Saving
- Display and/or Exportation or Deletion of Stored Analysis

Product Overview

HVACR Instruments

Si-PM3

Si-VV3

Si-HH3

Air Flow
Air Velocity
Humidity
Temperature
Pressure
Smartphone App

Si-VH3

Si-TT3

Si-HVACR App

Si-TI3

Bluetooth®

ANDROID APP ON Google play

Download on the App Store

Sauermann offers a complete range of innovative and economical instrumentation solutions for important HVAC measuring parameters including Air Flow, Air Velocity, Humidity, Temperature, and Pressure

Thermo-Hygrometer

Si-HH3

- 0 to 100 %RH
- -40 to 140°F$_{td}$ (-40 to 60°C$_{td}$)
- -4 to 140°F (-20 to 60°C)
- Wireless Bluetooth® communication

Digital Differential Pressure Manometer

Si-PM3

- -24 to 60 inH_2O (-150 to 150 hPa)
- Air velocity and airflow with Pitot tube (optional)
- Wireless Bluetooth® communication

Infrared Thermometer

Si-TI3

- Optical: DS 12:1
- Adjustable emissivity
- -40 to 935°F (-40 to 500°C)
- One second response time
- Wireless Bluetooth® communication

Dual Input Thermometer

Si-TT3

- Dual channel K thermocouple (two probes included)
- -328 to 2372°F (-200 to 1300°C)
- Wireless Bluetooth® communication

Hotwire Thermo-Anmometer

Si-VH3

- 31.5" (80 cm) telscopic rod with double graduation
- 0 to 5905 fpm (0 to 30 m/s)
- 14 to 140°F (-10 to 60°C)
- Wireless Bluetooth® communication

Vane Thermo-Anemometer

Si-VV3

- Large vane probe with 6.5' (2m) cable
- 80 to 5905 fpm (0.4 to 30 m/s)
- 14 to 140°F (-10 to 60°C) Wireless Bluetooth® communication

Product Overview

Refrigeration / Digital Manifolds

Si-RM3

Si-RM1

DF 110

Superheat
Subcool
Temperature
Pressure
Vacuum
Leak Detection
Smart Wireless Probes

Si-RV3

Si-Manifold App

ANDROID APP ON Google play

Download on the App Store

Si-RM13

Bluetooth®

Sauermann offers a new, unique, innovative and economical instrumentation solutions for our refrigeration professionals to quickly and easily monitor superheat, subcool, temperatures, pressures, vacuum and dangerous refrigerant gas leaks.

Smart Wireless Probes

Si-RM1

- Dual valve system for simultaneous measurement AND charge/discharge of refrigerant
- Range up to 870 psi (60 bar)
- Built-in Schrader® cores
- Condensation & evaporation temperatures
- IP54 protection

Digital NTC Temperature Probes

Si-RM2

- -40 to 302°F (-40 to 150°C)
- Real time superheat and subcooling calculations
- IP54 protection
- Eliminates need for manual calculations

Smart Wireless Manifold Probes

Si-RM3

- Measurement during charging
- Accurate high and low pressure
- Built-in Schrader® cores
- Real time superheat and subcooling calculations
- Bluetooth® communication

Smart Wireless Vacuum Probe

Si-RV3

- High accuracy Pirani® sensor
- Vacuum measurement during evacuation
- Range from 5 to 25,000 microns
- No need for hoses
- Built-in Schrader® cores
- IP54 protection
- Bluetooth® communication

Complete Manifold Kit
w/ Bypass & Wireless Probes

Si-RM13

- Extra durability: Anodized aluminum body
- Measurement during charging
- Range up to 870 psi (60 bar)
- Built-in Schrader® cores
- Real time superheat & subcool
- Bluetooth® communication
- Includes set of 3 hoses

Refrigerant Leak Detector

DF110

- Detects all HCFC & HFC refrigerants
- Detects 5% hydrogen
- Heated diode sensor
- Sensitivity options: high, low & normal
- Manual & automatic autozero

Free App

Si-Manifold

- User friendly
- Stores up to 124 refrigerants
- Gauge, table and graphic visualizations
- Works with the SI-R Series
- Export reports easily
- Available for iOS and Android
- Bluetooth® with manifold & smart probes

Services

Calibration / Hotline / Maintenance

Customer service experts

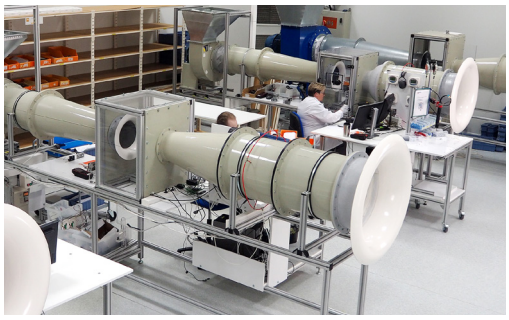
For any repair, calibration or device feedback requests, contact us today!

Accessible 24/7

Fast and easy-to-use

Follow-up in real time

www.e-inst.com/contact



To complement our range of measuring instruments, a team of more than 40 people offers a wide range of services, such as calibration and adjustments, after-sales support, hotline, on-site services and training.

Our team of experts will accompany you throughout your project and will adapt to your needs thanks to more than 40 years of experience and our sophisticated laboratory equipment.

Calibration and adjustments

After-sales services

Hotline

On-site services

Training

Our laboratories, spanning over 16,000 sq ft, allow us to offer you all kinds of metrological services related to:

- Temperature
- Humidity
- Air velocity
- Air flow
- Pressure
- Gases (O_2, CO, NO, SO_2, NO_2, C_xH_y, refrigerants)
- Weighing
- Radiometry
- Tachometry
- Light measurement
- Electrical current

Training

Technical Training Classes

Webinar Trainings Available!

Safety, Combustion Analysis, & Air Quality Testing

Residential
Commercial
Industrial

Class Topics Include

Combustion Process:

- What is combustion?
- 3 T's of combustion
- Excess air
- CO_2 (carbon dioxide)
- Direct O_2 vs. CO_2 (why measuring is imporatant)
- CO (carbon monoxide)
- Draft
- Heat exchanger test
- How to use an analyzer
- Why perform combustion test and why use analyzers?
- Why do we need to measure?
- How contractors can make money ($$) using an analyzer
- Atmospheric vs. High Efficiency condensing boilers / furnaces!
- Sauermann's series of analyzers and IAQ monitors
- Combustible gas leak detection: soap bubbles vs. actual detection

Class Counts for 2 NATE CEU Hours!

The Gold Standard for HVACR Technician Certification

Built with Quality In Mind

HVAC Instruments

Combustion Gas Analyzers

Condensate Removal Solutions

Digital Manifolds

Industrial Emissions Analyzer

Indoor Air Quality Monitors

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