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Data Sheet

August 13, 2026

GE / BHA / PRECIPTECH

GE / BHA / PrecipTech Power Guard SQ-300 Automatic Voltage Control

GE / BHA / PrecipTech Industrial Controllers & PLCs. Current: to-voltage relationships.

**MODEL****GE / BHA /
PrecipTech SQ-
300****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****SQ-300****LISTING**[https://aumictechlabs.c
om/products/sq-300-2/](https://aumictechlabs.com/products/sq-300-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Power Guard SQ-300 is a microprocessor-based automatic voltage control system engineered for electrostatic precipitators. It manages voltage and current to maximize dust collection efficiency while minimizing power consumption through advanced spark response algorithms and real-time parameter optimization. Technical Specifications Control and Regulation Automatic Voltage Control (AVC) technology for ESP field optimization Patented spark response algorithm enabling rapid power restoration after spark events Adjustable fast and search ramp rates for dynamic tuning Automated I/E ratio selection to optimize current-to-voltage relationships Adjustable background power settings for application-specific configuration Enhanced back corona detection and control kV min/max measurement and monitoring Analysis and Diagnostics On-line waveform analysis evaluates T/R set efficiency and power quality Diagnosis screen with problem warnings and corrective action suggestions On-board trending of all SQ-300 parameters in real time Historical alarm data logging and storage V-I curve data point capture and storage

Over 20 status and alarm messages Display and Interface Backlit LCD display with scratch-resistant coating Six help menus and operating screens for operator guidance Optional large color touch screen interface with V-I curve visualization, history logs, and alarm generation

Performance Features Increased average power delivery to the field through automated tuning Energy management system maintains opacity below preset limits using minimal power consumption Optional tumbling hammer control for specialized applications Built-in security features Key Features Microprocessor-based design for precision voltage and current management Real-time operational trending and historical data retention Rapid spark response and automatic power recovery Configurable ramp rates and background power for process optimization Comprehensive diagnostics with operator guidance Typical Applications Electrostatic precipitator systems across industrial dust collection, air pollution control, and emission reduction operations. Compatibility & Integration The SQ-300 interfaces via backlit LCD display and supports optional color touch screen operator terminals for remote monitoring and configuration.

Features & description

From manufacturer datasheet

Features

- Microprocessor Power Guard AVC for ESP
- Enhanced back-corona detection and control
- Automated I/E ratio selection
- Automatic ramp rate; adjustable background power
- Backlit LCD with help menus / operating screens
- On-line waveform analysis

Applications

- Electrostatic precipitator TR set automatic voltage control
- Back-corona detection and power optimization
- On-line precipitator waveform analysis
- Plant ESP performance management

SQ300 Characteristics / Specifications

PARAMETER	VALUE
Model	SQ-300
Product Name	Power Guard SQ-300
Manufacturer	GE / BHA / PrecipTech
Instrument Type	Automatic Voltage Control Management System
Application	Electrostatic precipitator (ESP) TR control
Catalogue Number Family	08700500-001
Line Frequency Typical Listings	60 Hz
Control Technology	Microprocessor-based AVC
Display	Backlit LCD with scratch-resistant coating
Operator Interface	Multi-screen help and operating menus
Back Corona	Enhanced detection and control
I/E Ratio	Automated selection
Ramp Rate	Automatic
Background Power	Adjustable setting
Waveform Analysis	On-line
Form Factor Class	Panel / rack AVC electronics (~8.5 × 11 × 2.5 in listings)
Ship Weight Class	~15 lb
Product Status	OEM end-of-life; secondary market support common
Brand Lineage	BHA Group / GE Energy / PrecipTech Notes Specs from BHA/GE Power Guard SQ-300 product descriptions and reseller listings. Confirm exact catalogue number, line frequency (50/60 Hz), and I/O on the unit nameplate.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

performance management

Key Features

- Microprocessor Power Guard AVC for ESP
- Enhanced back-corona detection and control
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Notes

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.