



Multi-channel Field Voltage Detection

NOVX SERIES 3350/3360

Simco-Ion series of Novx Multi-channel Field Voltage Detection Systems provides the capability to simultaneously detect, measure, record and monitor electrostatic field voltages in multiple locations. The versatile antennas used with these systems allow their use in a variety of applications including monitoring sensitive workstations, in-tool voltages, or ionizer performance with the option of closed-loop control to select ionizer products. Up to 3 sensors can be connected to an individual instrument. This multi-channel capability provides a cost-effective monitoring solution for multiple areas or ionizers. Data input is actively monitored and logged with time stamps using Calibrator_Reader. The instruments have user settable thresholds and alarm levels that provide a proactive safeguard for critical areas when interfaced to an alarm output. Out of range conditions can trigger a remote alarm light or audible alarms, shut down a critical process, or make adjustments to an ionizing fan.

Features



- Digital, microprocessor-based controllers, multi-channel, digital I/O, auxiliary I/O, local addressability, RS-485/Modbus or Ethernet data output
- Multiple antenna configurations including passive, active, and high speed electrometer
- Precision resolution
- Programmable closed-loop control for up to 3 SSDC ionizer fans or a 3-fan blower
- Programmable alarm set-points with tool shutdown option
- Voltage/polarity displays, local red/green LEDs each channel

Benefits

- Provides easy integration, cost/performance advantages over other monitoring solutions, direct communication to other Novx instruments or to a tool controller.
- Wide variety of applications: monitor field voltage at distances and ionizer balance; perform In Situ decay testing without the added expense of a CPM
- Measure and record field voltage down to 0.1V
- Enable closed-loop feedback control to select ionizers based on balance or decay test results
- Reduce process variations, decrease scrap/rework, and improve process yields
- Visual indicators at the instrument



Specifications

	3350	3360
Capacity	1, 2, or 3 fans (3350/3360 only)	1, 2, or 3 fans (3350/3360 only)
Reporting Range	0 to $\pm 500V$	0 to $\pm 100V$
Accuracy	$\pm 0.5V$	$\pm 1V$
Audible Alarm Set-points	$\pm 0.5V$, min	$\pm 1V$, min
LEDs Each Channel	Red/green or alarm indicator	Red/green or alarm indicator
Alarm Set-point	Programmable	Programmable
Zero Set-point	Programmable	Programmable
Aux Out	Open collector	Open collector
Output Signals	Digital	Digital
Antennas	up to 3 channels	up to 3 channels
Decay Testing	NA	up to 3 channels
Communication	Novx Com RS-485/Modbus, Ethernet	Novx Com RS-485/Modbus, Ethernet
Digital Display/Channel	4-Digit	4-Digit
External Power Supply Input Output	100-240V, 50/60 Hz $\pm 12VDC$, +5 VDC	100-240V, 50/60 Hz $\pm 12VDC$, +5 VDC
Dimensions	1.75W x 6.5D x 6H in. (4.4W x 16.5D x 15.2H cm)	1.75W x 6.5D x 6H in. (4.4W x 16.5D x 15.2H cm)
Weight	1.8 lb (.82 kg)	1.8 lb (.82 kg)
Enclosure	Stainless Steel	Stainless Steel
Warranty	Two-year limited warranty	Two-year limited warranty
Certifications	RoHS2 	RoHS2 

Calibration

Instruments are shipped calibrated and certified. Calibration must be validated annually to meet ISO certification compliance requirements.

Customer Support

Technical support, customer training, and optional extended Service Agreements are all available. Contact your Simco-Ion product sales representative for details.

Special Features

These instruments incorporate 3 channels which include 3 real-time voltage displays and 3 sets of red/green LEDs to indicate the status of each channel. Each system interfaces with the Novx Calibrator_Reader for full setup, visual monitoring, and logging capability. Files can be exported for Excel graphing and analysis. These instruments can operate as stand-alone systems and interface to the process for initiated response.

Applications

The **Novx Passive Detection System, Series 3350** connects with passive antennas to detect low level field voltage change and ion current ($\leq 400V$) with sensitivity down to 1V. Antenna connection configurations:

- Monitor field voltages on moving targets
- Monitor ionizer balance
- Provide closed-loop control to ionizer fans
- Distinguish the proximity of field voltages from steady state DC ionizer signals

The **Novx Active Detection System, Series 3360** connects to active antennas, providing similar field voltage and ion current detection capability as the 3350 with the addition of decay tests. The powered antenna acts as a charged plate monitor (CPM) to periodically measure ionizer discharge times at programmable frequencies.

Antenna connection configurations:

- Monitor field voltages on moving targets
- Monitor ionizer balance
- Distinguish the proximity of field from steady state DC ionizer signals
- Perform decay testing automatically or on command



DS-3350_V5 - 8/14
© 2014 Simco-Ion
All rights reserved.

Simco-Ion

Technology Group
1601 Harbor Bay Pkwy, Ste. 150
Alameda, CA 94502

Tel: 800.367.2452 (in USA)
Tel: 510.217.0600

info@simco-ion.com
www.simco-ion.com