



# Digital Controllers

## MODEL 5520/MODEL 5580

Simco-Ion's Digital Controller Models 5520 and 5580 control and monitor parameters and ionizer performance for the Digital Ceiling Emitter Model 5511 and the Digital AeroBar<sup>®</sup> Ionizer Model 5585. Both controllers allow individual or system wide ionizer control.

The smaller Model 5520, which accommodates up to 20 emitters, makes integration inside process tools or small room configurations easy and convenient. The larger Model 5580 handles large capacity systems, supporting up to 80 ionizers for full room and tool ionization coverage. Both ceiling emitters and AeroBars can be integrated on a controller for a customized solution.

Use the controller's on-board LCD screen and push buttons or the Model 5571 handheld remote for operational functions that include assigning individual controller addresses, setting ionizer parameters and synchronization for optimized ion performance.

Both models of the Digital Controller poll emitter status to offer system feedback of ionizer performance and alarm status, which can be output to FMS monitoring systems.

### Features



- Choice of 20 or 80 ionizer capacity models
- Mix and match ceiling emitters and AeroBars
- Mix and match ionizer mode settings
- On-board LCD screen
- Settable polling periods
- Visual/audible alarms
- FMS output; RS-485 port

### Benefits

- Customized solutions for small or large needs
- Integrated solutions for room system coverage, over tools, inside tools and workstations
- Allows individual ionizers on one controller to operate in Pulsed DC, Steady State DC or Standby modes simultaneously for optimal performance in each location and easy maintenance
- Allows setting of either global or individual ionizer parameters and provides easy access to ionizer and alarm status
- Adjust schedule to suit the area needs based on time to poll the number of emitters and criticality of the area
- Immediate notification of non-responsive or alarming ionizer
- Provides system status to FMS or host system



## Specifications

<b>Power</b>	4W plus 1W per ionizer
<b>Input</b>	100/115/250 VAC ±10%; 50/60 Hz voltage selectable and fuse protected
<b>Output</b>	24 VAC
<b>Output Signal</b>	RS-485 link to emitters or AeroBars
<b>Capacity</b>	Model 5520: 20 Model 5511 ceiling emitters or Model 5585 AeroBars Model 5580: 80 Model 5511 ceiling emitters or Model 5585 AeroBars
<b>Interface</b>	On-board LCD screen, six keys for some access to operating variables; Handheld Terminal Model 5571 connects for full access; second multidrop RS-485 channel for communication to host PC or FMS system; relay or 4-20 mA outputs for remote alarm indication
<b>Indicators</b>	Green LED for power on, red LED for alarm, audible beep indicates alarm and/or other conditions
<b>Dimensions</b>	Model 5520: 2.96H x 2.76W x 12.42L in. (7.52H x 7.01W x 31.55L cm) Model 5580: 6.20H x 4.37W x 13.2L in. (15.75H x 11.10W x 33.53L cm)
<b>Weight</b>	Model 5520: 3.5 lb (1.59 kg); Model 5580: 7 lb (3.18 kg)
<b>Certifications</b>	SEMI F47 RoHS Compliant  

## Ordering Information

91-5520R	Digital Controller, supports up to 20 ionizers
91-5580R	Digital Controller, supports up to 80 ionizers
33-1790-10	FMS CPC cable, 22 AWG, 3 conductor, 1 plug, white, 10 ft (3.0m)
33-1790-40	FMS CPC cable, 22 AWG, 3 conductor, 1 plug, white, 40 ft (12.2m)
91-5571	Handheld Terminal
25-20660	IEC power cable, US plug, 8.2 ft (2.5m)
25-20710	IEC power cable, UK plug, 8.2 ft (2.5m)
25-20735	IEC power cable, German Schuko plug, 8.2 feet (2.5m)
25-20750	IEC power cable, China plug, 8.2 ft (2.5m)
25-0670	IEC power cable, US plug, 10 ft (3m)
25-0680	IEC power cable, US plug, 15 ft (4.6m)
25-0700	IEC power cable, no plug, 10 ft (3m)

## Handheld Efficiency

The Handheld Terminal Model 5571 operates with both the 5520 and 5580 controllers, allowing the user to access additional control functions. With 30 keys and a 20-character LCD screen, the Handheld Terminal offers a more detailed look at ionizer performance. Two levels of security access prevent unauthorized system changes.

The Handheld Terminal allows the user to change some parameter settings that cannot be accessed using the controller's on-board screen. These include setting alarm threshold percentages for each ionizer with audible alarms, if desired, as indicators that emitter point maintenance is required. The ionizer synchronization feature can be customized to send a start signal to all ionizers on a controller, optimizing effectiveness in adjacent areas.

When integrated with a facility monitoring system, setting the polling periods enables the user to control the amount of data collected; setting the retry periods reduces false alarms from communication errors.



*The Handheld Terminal Model 5571 allows extra settings and remote management.*

**SIMCO ION**<sup>TM</sup>  
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