Digital Room Ionization System

MODEL 5515 CEILING EMITTER
MODELS 5522/5582 CONTROLLERS
IONMANAGER PRO SOFTWARE

The Model 5515 Ceiling Emitter and Controller Models 5522/5582 comprise our state-of-the-art digital room ionization system. The two controller models enable the user to start with the Model 5522 controller capable of controlling a small system with 20 or fewer ceiling emitters and grow into a large system with full software monitoring capabilities by simply moving to the Model 5582 Controller. Digital technology allows each ceiling emitter’s parameters, including ion output, ion pulse timing or digital address, to be either individually set at its location using the Model 5571 and Model 5572 handheld controllers, or remotely set through IonManager Pro when integrated with the software. Precision fine tuning of each ceiling emitter enables the ionization system to achieve maximum performance in any airflow condition and for each application.

IonManager Pro software provides a visual management tool to monitor and manage the system, including alarm conditions, room layouts, and individual emitter and controller status. Automated notifications for alarm conditions and maintenance alerts are user controlled. Data logging provides a history of system changes and security levels assure access by only authorized users.

Features

- Fully digital technology
- Single-crystal silicon or titanium emitter points
- Advanced Feedback Technology
- Small and large capacity controllers

Benefits

- Provides precision control of all ionization parameters with expansive data output capabilities
- Ensures ultra-clean performance with low maintenance: single-crystal silicon emitter points offer compatible material for leading-edge wafer processing applications
- Maintains balanced, high ion output over long periods for stable performance between emitter point cleanings
- Enables user to grow from a small system with FMS output only to a large system using IonManager Pro software as requirements change
Specifications

**Input Voltage**
24 VAC, 50/60 Hz, 1W (typ)

**Output Voltage**
0-20 kVDC for each polarity; positive and negative output levels adjusted separately

**Control Signal**
Ionization parameters are adjusted with the 5571 Handheld Terminal, 5572 IR Remote, or via IonManager Pro software

**Connectors**
Telephone-type RJ-11 modular jack receptacle on each end of emitter

**Regulation**
Output and balance stability is achieved by independently regulating the ion emission current of each polarity at each emitter

**Timing**
Precise timing (0-10 sec or 0.1 sec resolution) is generated by a local microcontroller; LEDs on each emitter indicate the polarity of the ion emission

**Operating Mode**
Pulsed DC, steady-state DC or standby

**Emitters**
Single-crystal silicon or titanium replaceable emitter points

**Emitter Rods**
2.5, 5, 10, 15, 24, 36, 60 or 66 inch length
(6.4, 12.7, 25.3, 38.1, 61.0, 91.4, 152.4 or 167.6 cm)

**Cleanliness**
Single-crystal silicon ISO 14644 Class 1; titanium ISO 14644 Class 3 standards (better or equal to Fed. Std. 209(e) Class 1 equivalent)

**Alarm**
Alarm operates when emitter is no longer able to maintain preset ion output level; visual LED in the middle of the emitter; optional audible alarm at controller

**Ozone**
<0.005 ppm

**Operating Env.**
Temperature 59-95˚F (15-35˚C) nominal; humidity 20-60% RH non-condensing

**Dimensions**
1.2”H x 1.4”W x 17.5”L (3.1 x 3.6 x 44.5 cm)

**Weight**
16.4 oz (465 grams)

**Warranty**
Two year limited warranty

Digital Controllers

**Input Voltage**
100/115/220-240 VAC ±10% V, 50/60 Hz voltage selectable and fuse protected

**Output Voltage**
24 VAC

**Output Signal**
RS-485 to Emitters (5522 & 5582); Ethernet or RS-485 to IonManager Pro (5582 only)

**FMS Output**
Relay or 4-20 mA output (available on both Model 5522 and 5582 controllers; no software capability on the Model 5522 controller)

**Capacity**
Model 5582: 80 Model 5515 Ceiling Emitters
Model 5522: 20 Model 5515 Ceiling Emitters

**Indicators**
Green POWER; red ALARM, AUDIBLE ALARM LEDs

**Dimensions**
Model 5582: 6.2”H x 4.4”W x 13.2”L (15.8 x 11.1 x 33.5 cm)
Model 5522: 3.0”H x 2.8”W x 12.4”L (7.5 x 7.0 x 31.6 cm)

**Weight**
Model 5582: 7 lb (3.18 kg); Model 5522: 3.2 lb (1.4 kg)

**Certifications**

System Performance Security

The Model 5515 Ceiling Emitter, Model 5582 Controller and IonManager Pro software provide consistent ionization protection throughout your facility. The advance notification system communicates system alarms and warnings immediately so corrective action can be taken. The alarm notifications are user configurable and can be sent to multiple personnel via email, SMS or pager.

Emitters are connected to the Model 5582 Controllers, which communicate with IonManager Pro to send email notifications to a facility monitoring system or agent.

Ordering Information

91-5515C-xxR
Digital Ceiling Emitter with titanium emitter points in 2.5, 5, 10, 15, 24, 36, or 60 inch rod lengths

91-5515U-xxR
Digital Ceiling Emitter with single-crystal silicon emitter points in 2.5, 5, 10, 15, 24, 36, 60 or 66 inch rod lengths

91-5522-01
Digital Controller, supports up to 20 emitters (not compatible with IonManager Pro)

91-5582R
Digital Controller, supports up to 80 emitters

91-5582-SW-Vx
IonManager Pro software (x represents current version number)

91-5572
Infrared Remote Controller

91-5571
Handheld Terminal