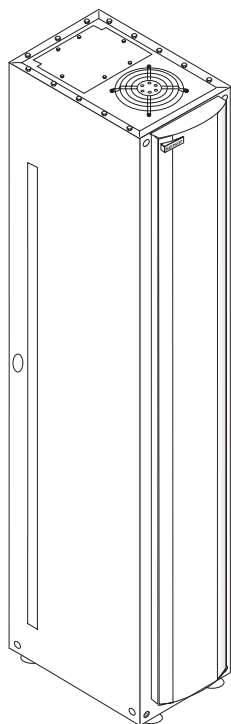




100V 120V

Sensor+ Series



## GENERAL INFORMATION

Sensor+ dimming systems provide high density, professional features and exceptional reliability for lighting applications that require the best the entertainment industry can offer.

### APPLICATIONS

- Professional and educational theatre
- Production studios
- Concert and performance halls
- Themed retail and dining
- Multi-use Convention Centers
- Houses of Worship

### FEATURES

- High dimmer density
- Up to two 2.4kW dimmers per module
- 6, 12, 24, and 48 module racks available
- Rugged industrial construction
- Installation flexibility
- Adaptable modular design
- 100,000A Short Circuit Current Rating (SCCR)
- Advanced configuration editing built into rack
- Stores up to 128 presets in memory
- Direct Ethernet control signal input
- Two DMX512-A inputs
- Standard system and rack monitoring with diagnostic reporting
- Supports ETC Dimmer Doubling™

### ACCESSORIES

- SmartLink® Button Stations and SmartLink TimeClock
- Dimmer Doubler
- Sound Suppression Hood
- Floor pedestal for 24-module rack
- Document holder

## ORDERING INFORMATION

### Installation Racks

MODEL	DESCRIPTION
SR48+	Sensor+ 48 Module Rack
SR24+	Sensor+ 24 Module Rack
SR12+	Sensor+ 12 Module Rack
SR6+	Sensor+ 6 Module Rack
SR24+1P	Sensor+ 24 Module Single Phase Rack
SR12+1P	Sensor+ 12 Module Single Phase Rack
SR6+1P	Sensor+ 6 Module Single Phase Rack

### Rack Options\*

MODEL	DESCRIPTION
AT48	Amp-Trap fuse option for 48-module rack
AT24	Amp-Trap fuse option for 24-module rack
AT12	Amp-Trap fuse option for 12-module rack
BK48	Bus kit for 2 – 48-module racks
BK24	Bus kit for 2 – 24-module racks
BK12	Bus kit for 2 – 12-module racks
AUX30-48	30" Auxiliary Rack(s) for 48-module rack
AUX19-48	19" Auxiliary Rack(s) for 48-module rack
AUX19-24	19" Auxiliary Rack(s) for 24-module rack
AUX19-12	19" Auxiliary Rack(s) for 12-module rack

\*Vibration Reduction mounts available for all Sensor+ racks. Contact ETC for details.  
Note: Power feeds above 800A up to 2000A require addition of a 30" auxiliary rack.

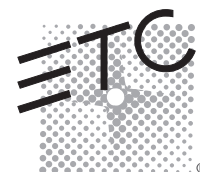
### Rack Accessories

MODEL	DESCRIPTION
SSSh24-48	Sensor+ Sound Suppression Hood – large
SSSh6-12	Sensor+ Sound Suppression Hood – small
Pedestal	Floor pedestal for 24-module rack
DH	Document Holder

### SmartLink Accessories

MODEL	DESCRIPTION
S-LPB	SmartLink Power Board for Sensor+ Racks*
S-10005	SmartLink 5-Button Station*
S-10010	SmartLink 10-Button Station*

\*One SmartLink Power Board required for station support.  
S-LPB supports up to four stations.  
Only one S-LPB may be enabled in a system.



## SPECIFICATIONS

## GENERAL

- Racks available in four sizes:
  - SR6+ 6 modules, 12 dimmers maximum
  - SR12+ 12 modules, 24 dimmers maximum
  - SR24+ 24 modules, 48 dimmers maximum
  - SR48+ 48 modules, 96 dimmers maximum
- Dual density (two dimmers per module), single density and half density dimmer modules available
- Operating temperature: 0-40°C / 32-104°F
  - Dimmer room HVAC systems must at all times maintain the specified ambient temperature at the dimmer rack.
  - Dimming systems operating within 10°F of the upper or lower temperature limits must strictly follow installation and operation guidelines to operate reliably.
- Relative humidity: 10-90% non-condensing
- All racks UL and cUL Listed
- UL924 Listed for Bypass operation

## MECHANICAL

- Rugged 16-gauge steel construction
- Fine-textured, scratch-resistant, epoxy paint
- SR6+ and SR12+ uses wall mount installation
- SR24+ can be wall or pedestal mounted
- SR48+ is floor mounted
- Top and bottom conduit access through removable panels (SR48+) or knockouts (SR6+, SR12+, and SR24+)
- No tools required for module removal or installation
- Keyed module slots prevent insertion of inappropriate module types
- Front access to all wiring and terminations
- Full height locking door
- Electrostatic air filter easily removed from door for periodic cleaning
- High efficiency cooling system with airflow sensor
- High visibility LED status beacon

## ELECTRICAL

- SR6+, SR12+ and SR24+ accept:
  - Three phase 120/208 VAC
  - Single phase 120/240 VAC
- SR48+ accepts:
  - Three phase 120/208 VAC
- Line feed frequencies from 47-63Hz
- Line feed voltage range is 91-139 VAC\*
- Load terminals accept up to #4 AWG (25mm<sup>2</sup>) wire
- Short Circuit Current Rating: 100,000A RMS symmetrical at 240VAC
- Auxiliary equipment racks and custom switchgear/distribution available (call ETC for details)

\*Note: Suggested max main transformer tap 135V to allow for line fluxuation

## CONTROL ELECTRONICS

- Sensor+ Control Electronics Module (CEM+)
- Single Ethernet control signal input
- Two DMX512-A inputs
- Standard diagnostic reporting via browser-based interface or DimStat™ software
- Supports Dimmer Doubling™
- Supports SmartLink® control of presets

## OPTIONS

- Advanced Features (AF) dimmer-specific load and diagnostic reporting
- Amp-Trap® fuses to allow feeding individual racks from oversize mains
- Bus kits available
- Vibration reduction kits available for all racks
- SmartLink Power Board
- SmartLink TimeClock

## ADDITIONAL INFORMATION

## Compatible Dimmer Modules

SENSOR STANDARD MODULES	
MODEL	DESCRIPTION
D15/D20	Dual 15A/20A Dimmer Module – 350µS
D15E/D20E	Dual 15A/20A Dimmer Module – 500µS
D50AF	Single 50A Dimmer Module – 500µS – AF
D100AF*	Half 100A Dimmer Module – 500µS – AF
SENSOR SPECIAL PURPOSE MODULES	
ELV10	Dual 10A Dimmer Module for electronic low voltage transformers
D15FB/D20FB	Single 15A/20A Dimmer Module for two wire fluorescent with emergency battery backup
D15F/D20F	Single 15A/20A Fluorescent Dimmer Module
R15AF/R20AF	Dual 15A/20A Relay Module
CC15/CC20	Dual 15A/20A Constant Circuit Breaker Module
AFM	Air Flow Module

\*Half-density modules use two module slots.

## Control Modules

MODEL	DESCRIPTION
CEM+	Control Electronics Module +

## Load Wiring Lug Capacity

CONNECTION	WIRE SIZE
10A, 15A, 20A, and 50A lugs	4 AWG Max. (25mm <sup>2</sup> )
100A lugs	2/0 Max.

## Primary Feed Lug Capacity

CONNECTION	WIRE SIZE	FEED RATING
SR48+	Dual 600 kcmil – 2 AWG	800A*
SR24+	Dual 350 kcmil – 4 AWG	400A
SR12+	Dual 250 kcmil – 6 AWG	200A
SR6+	Single 2/0 – 14 AWG	100A

## Sound Pressure Level (dBA)

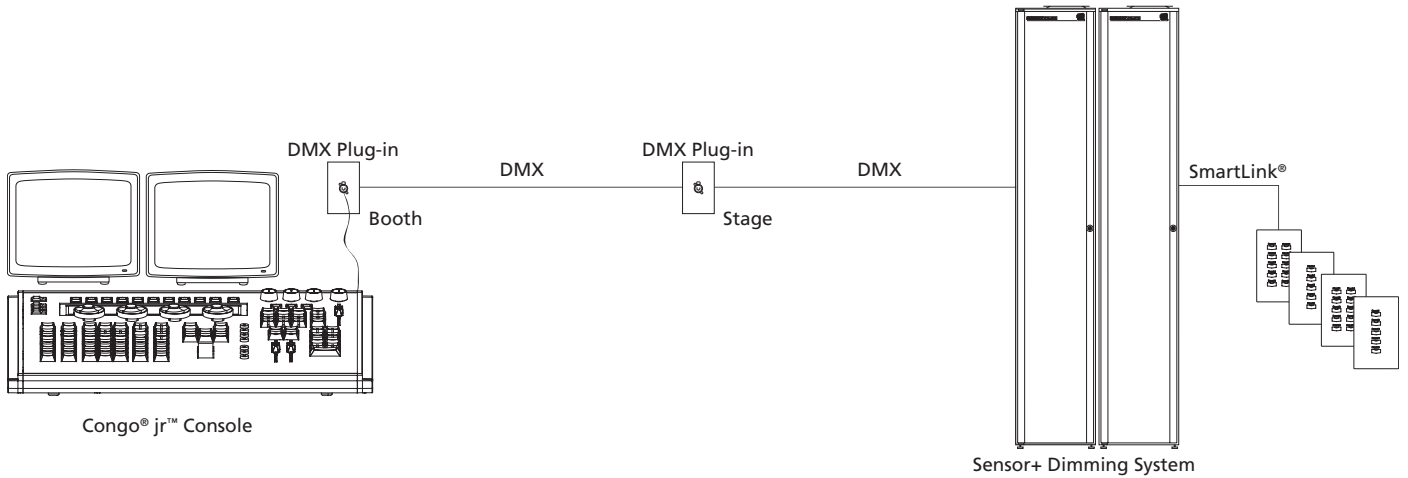
MODEL	dBA @ 1000Hz (1kHz)**	
	WITHOUT	WITH SSSH***
SR48+	37.0	30.9
SR24+	40.2	34.0
SR12+	41.8	33.8
SR6+	26.0	21.4

\*With addition of an AX48-30 rack and amp traps, feeder sizes can increase up to 2000A max. See Sensor Aux Bay Data sheet for more details.

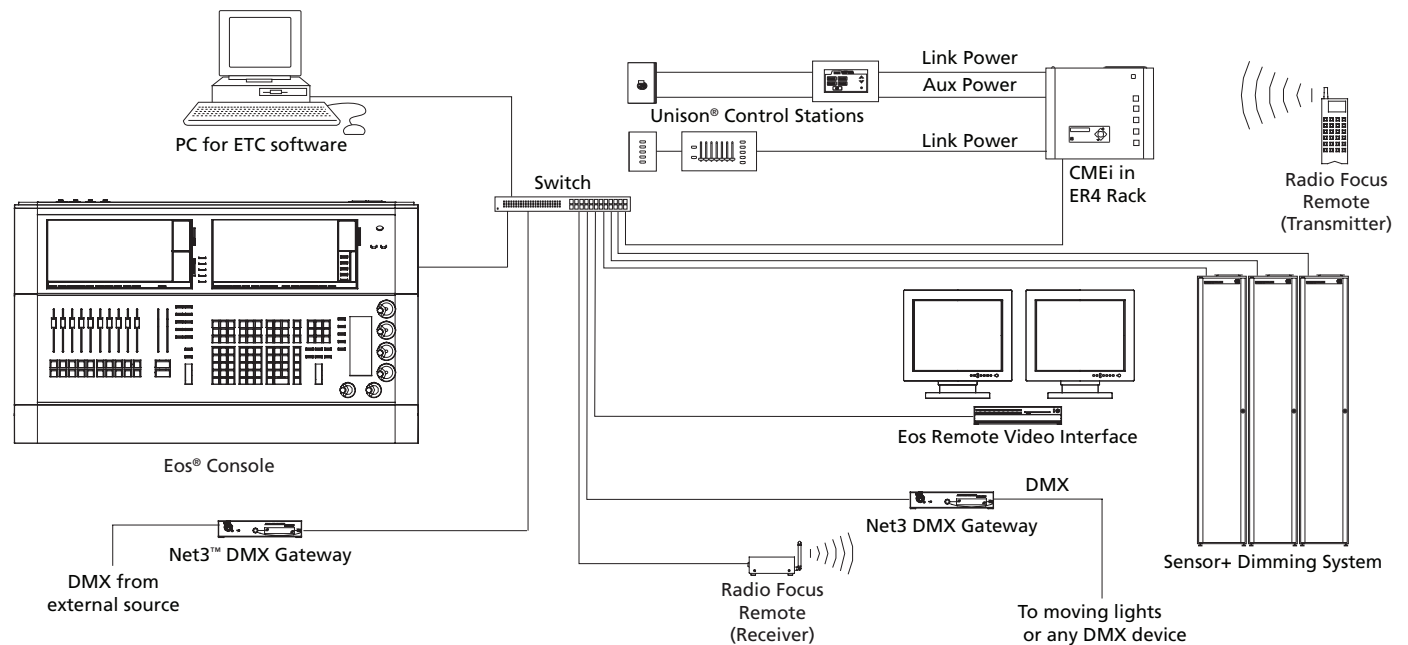
\*\*dBA values for each Sensor rack measured at one meter. Visit [www.etconnect.com](http://www.etconnect.com) for full spectrum dBA ratings.

\*\*\*Sensor Sound Suppression hood (SSSh).

TYPICAL SYSTEM RISER



TYPICAL NETWORK RISER



PHYSICAL

Empty Dimmer Rack Weights

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
SR48+	188	86	198	90
SR48+ Door*	31	14	35	16
SR24+	107	49	115	53
SR24+ Door*	17	8	20	9
SR12+	45	21	50	23
SR12+ Door*	11	5	14	6.5
SR6+ with Door	36	16	45	21

\*Rack doors ship separately.

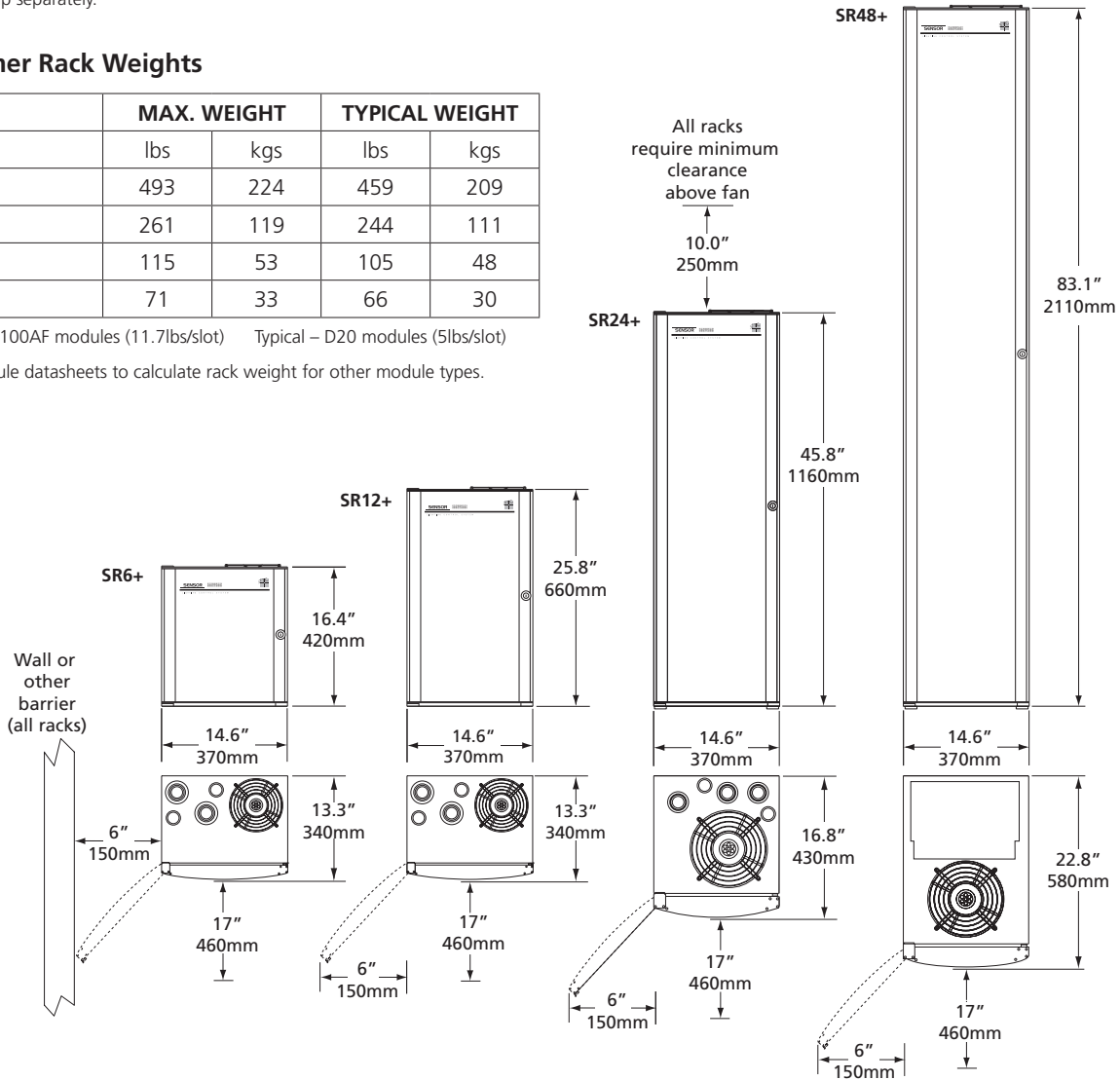
Installation Rack Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
SR48+	83.1	2110	14.6	370	22.8	580
SR24+	45.8	1160	14.6	370	16.8	430
SR12+	25.8	660	14.6	370	13.3	340
SR6+	16.4	420	14.6	370	13.3	340

Full Dimmer Rack Weights

MODEL	MAX. WEIGHT		TYPICAL WEIGHT	
	lbs	kgs	lbs	kgs
SR48+	493	224	459	209
SR24+	261	119	244	111
SR12+	115	53	105	48
SR6+	71	33	66	30

\*Maximum – D100AF modules (11.7lbs/slot) Typical – D20 modules (5lbs/slot)  
Refer to module datasheets to calculate rack weight for other module types.



Corporate Headquarters • 3031 Pleasant View Rd, PO Box 620979, Middleton WI 53562 0979 USA • Tel +1 608 831 4116 • Fax +1 608 836 1736  
 London, UK • Unit 26-28, Victoria Industrial Estate, Victoria Road, London W3 6UU, UK • Tel +44 (0)20 8896 1000 • Fax +44 (0)20 8896 2000  
 Rome, IT • Via Pieve Torina, 48, 00156 Rome, Italy • Tel +39 (06) 32 111 683 • Fax +44 (0) 20 8752 8486  
 Holzkirchen, DE • Ohmstrasse 3, 83607 Holzkirchen, Germany • Tel +49 (80 24) 47 00-0 • Fax +49 (80 24) 47 00-3 00  
 Hong Kong • Room 1801, 18/F, Tower 1 Phase 1, Enterprise Square, 9 Sheung Yuet Road, Kowloon Bay, Kowloon, Hong Kong • Tel +852 2799 1220 • Fax +852 2799 9325  
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