

**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  
Large themed retail and dining

**FEATURES** High dimmer density  
Up to two 2.4kW dimmers per slot  
6, 12, 24, and 48 slot racks available  
Rugged industrial construction  
Installation flexibility  
Adaptable modular design  
Advanced configuration editing built into rack  
Stores up to 32 Backup Looks in rack memory  
Dual DMX512 connections  
Standard ETCLink reporting and configuration networking  
ETC Dimmer Doubling™  
All racks UL and cUL listed

**ACCESSORIES** Handheld Controller  
Sensor Backup Stations  
Dimmer Doubler™  
Sound Suppression hood

**ORDERING INFORMATION**

**Installation Racks**

Model#	Description
SR6	Sensor 6 Module Rack
SR12	Sensor 12 Module Rack
SR24	Sensor 24 Module Rack
SR48	Sensor 48 Module Rack
SR6 - 1P	Sensor Single Phase 6 Module Rack
SR12 - 1P	Sensor Single Phase 12 Module Rack
SR24 - 1P	Sensor Single Phase 24 Module Rack

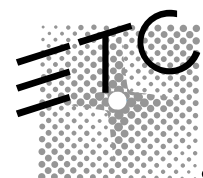
**Rack Options\***

Model#	Description
AT12	SR12 Amp Trap fuse option
AT24	SR24 Amp Trap fuse option
AT48	SR48 Amp Trap fuse option
BK12	SR12 Bussing option
BK24	SR24 Bussing option
BK48	SR48 Bussing option
SR12 AUX 19	19" Auxiliary Rack(s) for Sensor SR12 Racks
SR24 AUX 19	19" Auxiliary Rack(s) for Sensor SR24 Racks
SR48 AUX 12	12" Auxiliary Rack(s) for Sensor SR48 Racks
SR48 AUX 19	19" Auxiliary Rack(s) for Sensor SR48 Racks
SR48 AUX 30	30" Auxiliary Rack(s) for Sensor SR48 Racks

\*Vibration Reduction mounts available for all sensor rack modules. Contact ETC for details

**Rack Accessories**

Model#	Description
SHH	Sensor Handheld Control Unit
SB08	Sensor Backup Station - 8 Button
SB16	Sensor Backup Station - 16 Button
DD	Dimmer Doubler without input connector
DD-B	Dimmer Doubler with Stage Pin input connector
DD-C	Dimmer Doubler with Twist-loc® input connector
SSSh 6-12	Sensor Sound Suppression Hood - small
SSSh 24-48	Sensor Sound Suppression Hood - large



## SPECIFICATIONS

<b>GENERAL</b>	<p>Four sizes of rack available</p> <ul style="list-style-type: none"> <li>6 module SR6 - 12 dimmer maximum</li> <li>12 module SR12 - 24 dimmer maximum</li> <li>24 module SR24 - 48 dimmer maximum</li> <li>48 module SR48 - 96 dimmer maximum</li> </ul> <p>Dual density (two dimmers per module), single density and double-slot single density dimmer modules available</p> <p>Ambient temperature: 0-40°C / 32-104°F Dimmer room HVAC systems must at all times maintain the specified ambient temperature <b>at the dimmer rack</b>. Dimming systems operating within 10 degrees F of the upper or lower temperature limits must strictly follow installation and operation guidelines to operate reliably.</p> <p>Ambient humidity: 30-90% non-condensing All racks UL and cUL listed</p>
<b>MECHANICAL</b>	<p>Welded, 16-gauge steel construction</p> <p>Fine-textured, scratch-resistant, gray epoxy paint</p> <p>SR6 and SR12 uses wall mount installation</p> <p>SR24 can be wall or pedestal mounted</p> <p>SR48 is floor mounted</p> <p>Mounting vibration isolation kits available for all size racks</p> <p>Top and bottom conduit access through removable panels (SR48) or knockouts (SR6, SR12, and SR24)</p> <p>No tools required for module removal or installation</p> <p>Keyed module slots prevent insertion of inappropriate module types</p> <p>Front access to all wiring and terminations</p> <p>Full height locking door</p> <p>Electrostatic air filter easily removed from door for periodic cleaning</p> <p>High efficiency cooling system with airflow sensor</p> <p>High visibility LED status beacon</p>
<b>ELECTRICAL</b>	<p>SR6, SR12 and SR24 accept:</p> <ul style="list-style-type: none"> <li>Three phase 120/208 VAC</li> <li>Single phase 120/240 VAC</li> </ul> <p>SR48 accepts</p> <ul style="list-style-type: none"> <li>Three phase 120/208 VAC</li> </ul> <p>Line feed frequencies from 47-63Hz</p> <p>Line feed voltage range is 90-140 VAC</p> <p>Load terminals accept up to #4 AWG wire (see chart)</p> <p>100k AIC rack rating*</p> <p>Auxiliary Equipment Racks and custom switchgear/distribution available (call ETC for details)</p>
<b>CONTROL ELECTRONICS</b>	<p>Sensor Control Electronics Module (CEM)</p> <p>Supports ETCLink diagnostic reporting</p> <p>Enables two DMX512 inputs</p> <p>Supports Dimmer Doubling™</p>
<b>OPTIONS</b>	<p>Dimmer Doubling™</p> <p>Sensor Handheld or Rackmount Control Unit (requires ETCLink)</p> <p>Advanced Features™ dimmer-specific output reporting</p> <p>AMP Trap fuses to allow feeding individual racks from oversize mains</p>

\*Racks loaded with D15, D20, D50AF and D100AF modules are certified for 100k AIC

## ORDERING INFORMATION

### Dimmer Modules

Model#	Description
<b>Standard Sensor Modules</b>	
D15	Dual 15A Dimmer Module - 350µS
D20	Dual 20A Dimmer Module - 350µS
D15E	Dual 15A Dimmer Module - 500µS
D20E	Dual 20A Dimmer Module - 500µS
D50AF	Single 50A Dimmer Module - 500µS - Advanced Features
D100AF*	Half 100A Dimmer Module - 500µS - Advanced Features
<b>Special Purpose Sensor Modules</b>	
D15F	Single 15A Fluorescent Dimmer Module
D20F	Single 20A Fluorescent Dimmer Module
R15AF	Dual 15A Relay Module - Advanced Features
R20AF	Dual 20A Relay Module - Advanced Features
BC15	Dual 15A Branch Circuit Breaker Module
BC20	Dual 20A Branch Circuit Breaker Module
CC15	Dual 15A Constant Circuit Breaker Module
CC20	Dual 20A Constant Circuit Breaker Module
CC50	Single 50A Constant Circuit Breaker Module
CC100*	Single 100A Constant Circuit Breaker Module
AFM	Air Flow Module

\*Half-density modules use two dimmer slots

### Control Modules

Model#	Description
CEM-48	Control Electronics Module (up to 48 dimmer)
CEM-96	Control Electronics Module (up to 96 dimmer)

### Load Wiring Lug Sizes

Connection	Wire Size	Torque
15-50 amp and fluorescent load lugs	14 - 10 AWG	35 inch/lbs
	8 AWG	40 inch/lbs
	4 - 6 AWG	45 inch/lbs
100 amp load lugs	14 - 8 AWG	75 inch/lbs
	6 - 4 AWG	110 inch/lbs
	2 - 1 AWG	150 inch/lbs
	1/0 - 2/0	180 inch/lbs
Neutral bus	16 - 6 AWG	25 inch/lbs
Equipment grounding	14 - 8 AWG	75 inch/lbs
	4 - 6 AWG	110 inch/lbs
	2 - 3 AWG	150 inch/lbs

### Line Wiring Lug Sizes

Wire Size	Torque
4 - 6 AWG	110 inch/lbs
1 - 2 AWG	150 inch/lbs
1/0 - 2/0 AWG	180 inch/lbs
3/0 - 4/0 AWG	250 inch/lbs
250 - 450 MCM	325 inch/lbs
500 - 750 MCM	375 inch/lbs
800 - 1000 MCM	500 inch/lbs

## RACK DIMENSIONS

### Installation Rack dimensions

Model	Height		Width		Depth	
	inches	cm	inches	cm	inches	cm
SR6	16.4	42	14.6	37	13.3	34
SR12	25.8	66	14.6	37	13.3	34
SR24	45.8	116	14.6	37	16.8	43
SR48	83.1	211	14.6	37	22.8	58

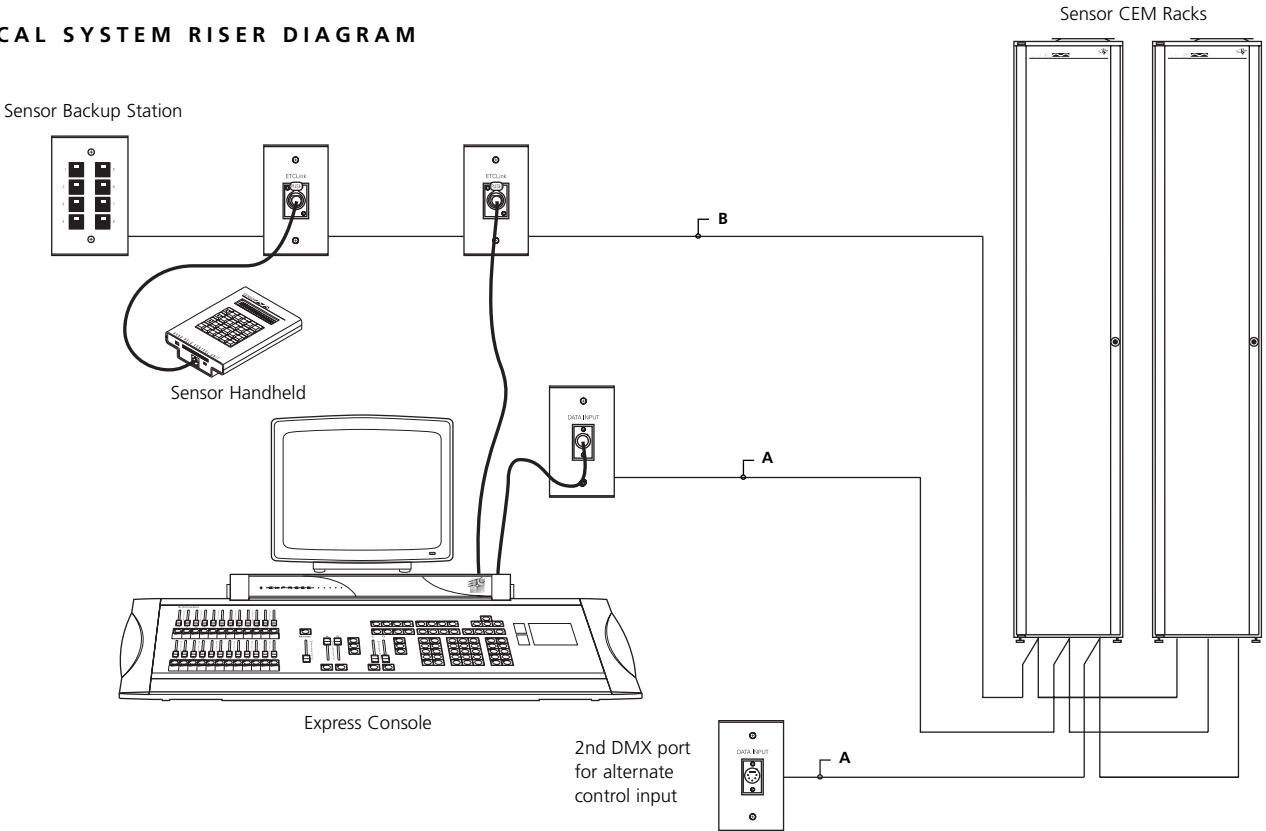
# Sensor® Racks

## Standard Series

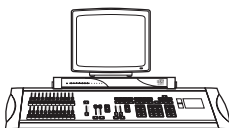
### ERROR MESSAGES




- ETCLINK**
- Ambient Overtemp
  - Ambient Temp High
  - Ambient Temp Low
  - Backup Mismatch
  - Config Mismatch
  - Dimmer Error
  - Data Error Port (A,B)
  - Dimmer Overtemp
  - ETCLink Failed
  - Frequency Error
  - MOD> Removed
  - No Airflow
  - No Data Port (A,B)
  - Overtemp #
  - Phase (A, B or C) Error
  - Phase (A, B or C) Off
  - Phase Detect Fail
  - Processor Fail
  - System Error
  - Temp Sensor Stuck
  - Zero Crossing Error

### TYPICAL SYSTEM RISER DIAGRAM



### Wire Types for Sensor CEM Racks with....

Device	Wire Type	
 Express Console	<b>DMX (XLR5)</b> Belden 9729	<b>A</b>

Device	Wire Type	
 Sensor Backup Station	<b>ETCLink (XLR6)</b> (1) Belden 9729 (2) #16 AWG Stranded Wires	<b>B</b>
 Sensor Handheld	<b>ETCLink (XLR6)</b>	<b>B</b>
 ETCLink Station	<b>ETCLink (XLR6)</b> (1) Belden 9729 (2) #16 AWG Stranded Wires	<b>B</b>

### RACK DIMENSIONS

#### Empty Dimmer Rack Weights

Model	Weight		Shipping Weight	
	lbs	kgs	lbs	kgs
SR6	36.0	16.0	45.0	21.0
SR12	45.0	21.0	50.0	23.0
SR12 Door*	11.0	5.0	14.0	6.5
SR24	107.0	49.0	115.0	53.0
SR24 Door*	17.0	8.0	20.0	9.0
SR48	188.0	86.0	198.0	90.0
SR48 Door*	31.0	14.0	35.0	16.0

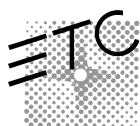
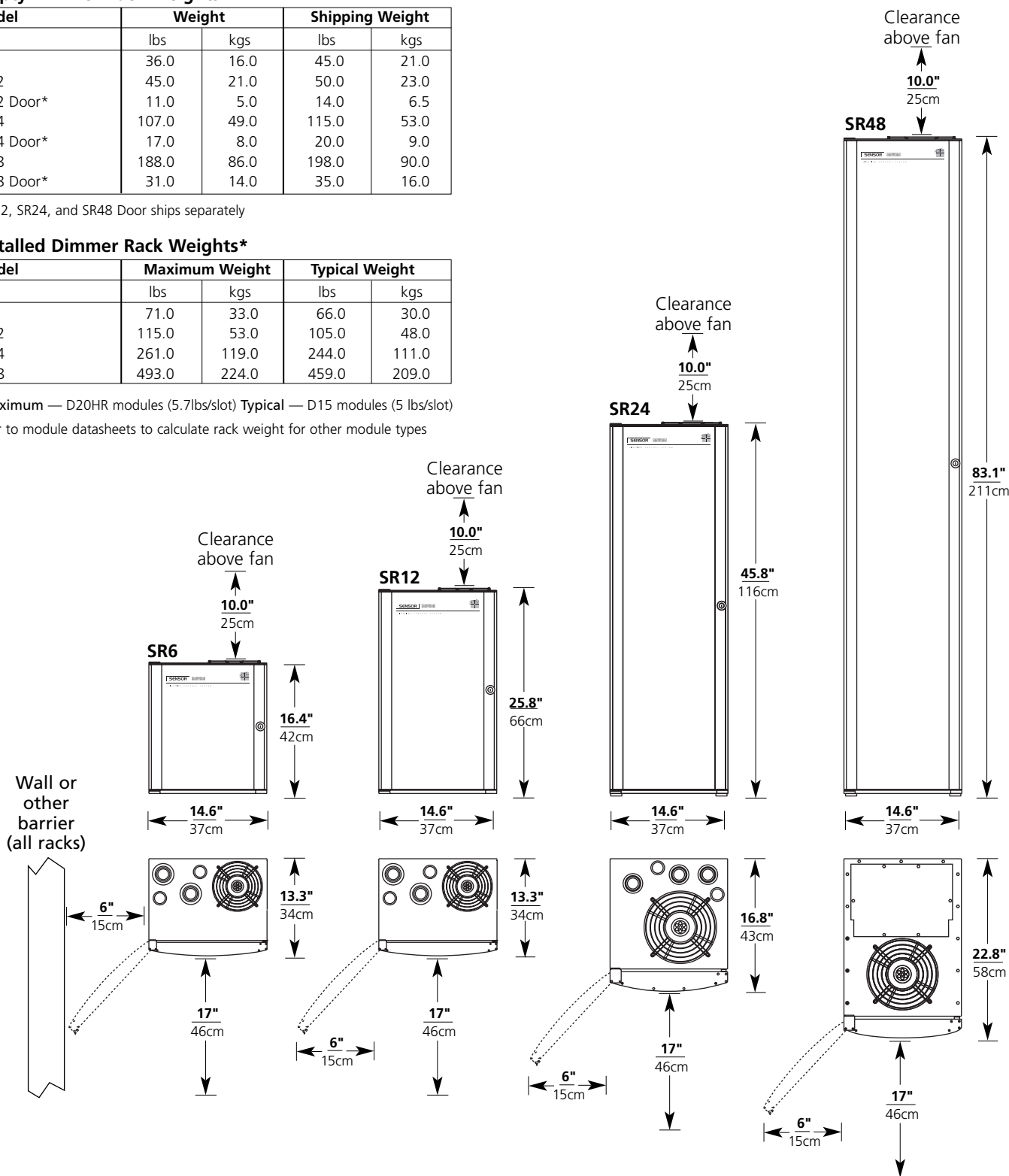
\*SR12, SR24, and SR48 Door ships separately

#### Installed Dimmer Rack Weights\*

Model	Maximum Weight		Typical Weight	
	lbs	kgs	lbs	kgs
SR6	71.0	33.0	66.0	30.0
SR12	115.0	53.0	105.0	48.0
SR24	261.0	119.0	244.0	111.0
SR48	493.0	224.0	459.0	209.0

\*Maximum — D20HR modules (5.7lbs/slot) Typical — D15 modules (5 lbs/slot)

Refer to module datasheets to calculate rack weight for other module types



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Sensor® products protected by U.S. Patent Numbers: 5,323,088, 5,352,958, and 6,002,563 European Number: 0603333 German Number: 69203609, US and International Patents Pending