ETC

Sensor3 ESR3 Installation Enclosures

Sensor3 230 V Series

Type(s)

Project

Date

Notes

GENERAL INFORMATION

Sensor3 power control systems provide high-density, professional features and exceptional reliability for lighting applications requiring top-of-the-line power control.

APPLICATIONS

- Professional and academic theatres
- Production studios
- Concert and performance halls
- Theme parks
- Themed retail and dining venues
- Hotels
- Multipurpose convention centers
- Arenas and stadiums
- Houses of worship

FEATURES

- Rugged industrial construction
- Variable speed fan to minimize noise
- Standard system monitoring with optional Advanced Features (AF) per-circuit reporting
- Adaptable modular design
- Up to 96 power control channels per enclosure
- 12-, 24-, 36-, and 48-module enclosures available
- Direct Ethernet control-signal input (Net3, sACN)
- Advanced configuration editing over network
- Two DMX512-A inputs

SPECIFICATIONS

GENERAL
- Enclosures available in four sizes:
  - 12 modules, 24 circuits maximum
  - 24 modules, 48 circuits maximum
  - 36 modules, 72 circuits maximum
  - 48 modules, 96 circuits maximum
- Dual-density modules (two circuits per module)
- Operating temperature: 0°–40°C (32°–104°F)
  - Electrical room HVAC systems must maintain the specified ambient temperature at the enclosure at all times.
- Relative humidity: 10–90% non-condensing

MECHANICAL
- Rugged 16-gauge steel construction
- Fine-textured, scratch-resistant epoxy paint
- Top and bottom cable access through removable panels
- Keyed module slots prevent insertion of incompatible 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 reporting
- High-visibility LED status beacon

ELECTRICAL
- ESR3 enclosures accept the following feeds:
  - Three-phase 230/400 VAC
- Line feed frequencies from 47–63 Hz
- Line feed voltage range is 200–265 VAC
- Short Circuit Withstand Rating: 22–46 kA at 230 V depending on module type
- Auxiliary equipment enclosures and custom switchgear/distribution available (call ETC for details)

CONTROL ELECTRONICS
- CEM3 Power Control Processor
- Panic input for emergency lighting control
- Full number pad for fast access to dimmer override and setup
- Dual redundant processors available
- System, enclosure, and diagnostic reporting standard
- Per-circuit reporting available with AF enclosures and modules

CONTROL POWER BACKUP OPTIONS
- RideThru Option (RTO):
  - Seamless transfer to backup power upon loss of incoming line power
  - Provides backup power for at least 6 seconds during power loss
  - Automatically recharges from power feed
- Battery Pack Option (BPO):
  - Seamless transfer to battery power upon loss of normal power
  - Provides backup power for 30 minutes during normal power loss
  - Automatically recharges from power feed during normal power conditions
  - Two hour recharge time from full discharge

REGULATORY AND COMPLIANCE
- All enclosures are CE compliant

ETC

ESR3 POWER ENCLOSURE CHART

Control Module

PART NO.	DESCRIPTION
7140A1003	CEM3 - Sensor3 CE Network Processor
7171A1001	NEFM - Network Electronic Filler Module with 5 Port Ethernet Switch (ESR24-ESR36-ESR48 enclosures only)

Sensor Installation Enclosure Accessories

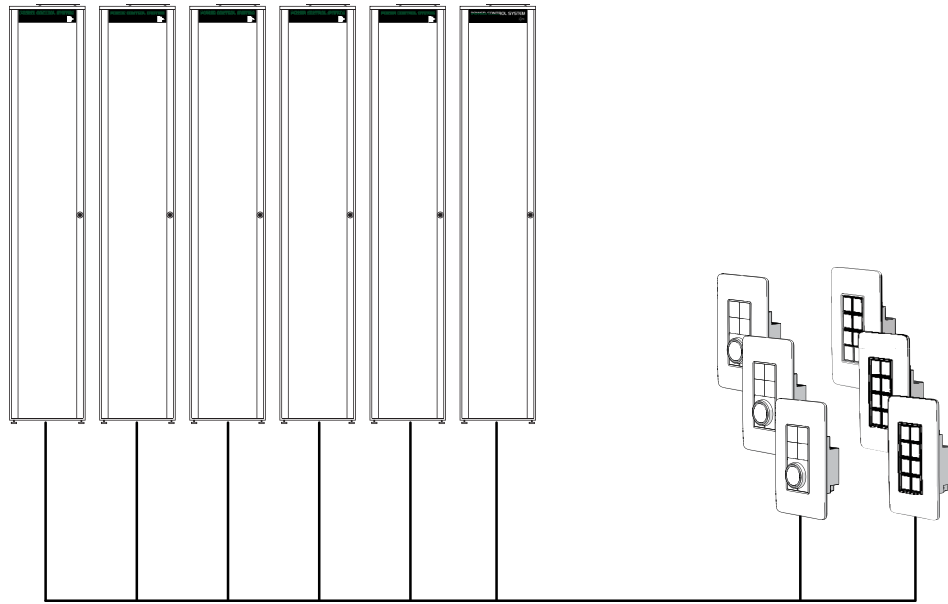| MODEL	DESCRIPTION
7144K1004	Dual Processor Redundant Tracking Kit (processor not included) - for ESR24-ESR36-ESR48 enclosures only
7150A3010	EFM Blank Electronic Filler Module (ESR24-ESR36-ESR48 enclosures only)
7140K1001	Sensor3 RideThru Option kit - supplies power to CEM3 Control Module for a minimum of 6 seconds during brief power failures
7140A1002	Sensor3 Wall-mount Battery Pack enclosure with one battery - supplies power to one CEM3 Control Processor for a minimum of 30 minutes during power outages
7140A1002-1	Sensor3 Wall-mount Battery Pack enclosure with one battery - supplies power to two CEM3 Control Processors for a minimum of 30 minutes during power outages
HW6109	Floor Vibration Mount Kit
HW6111	Wall Vibration Mount Kit (ESR24-ESR48 enclosures only)
7071A1033-4	Sensor3 floor pedestal for 24-module enclosure
7051A1071-4	SSSh24-48 - Sensor3 Sound Suppression Hood (ESR24-ESR36-ESR48 enclosures only)
7051A1072-4	SSSh12 - Sensor3 Sound Suppression Hood (ESR12 enclosures only)
7051A3073	Multiple Enclosure Splice Plate
7051A2029-4	DH - Document Holder

ADDITIONAL INFORMATION

Sound Pressure Level (dBA)

MODEL	dBA*	
Variable Fan Speed	High Speed	Low Speed
ESR3(AF)N-48	43.9	35.8
ESR3(AF)N-36	47.0	37.9
ESR3(AF)N-24	47.1	36.9
ESR3(AF)N-12**	53.3	53.2

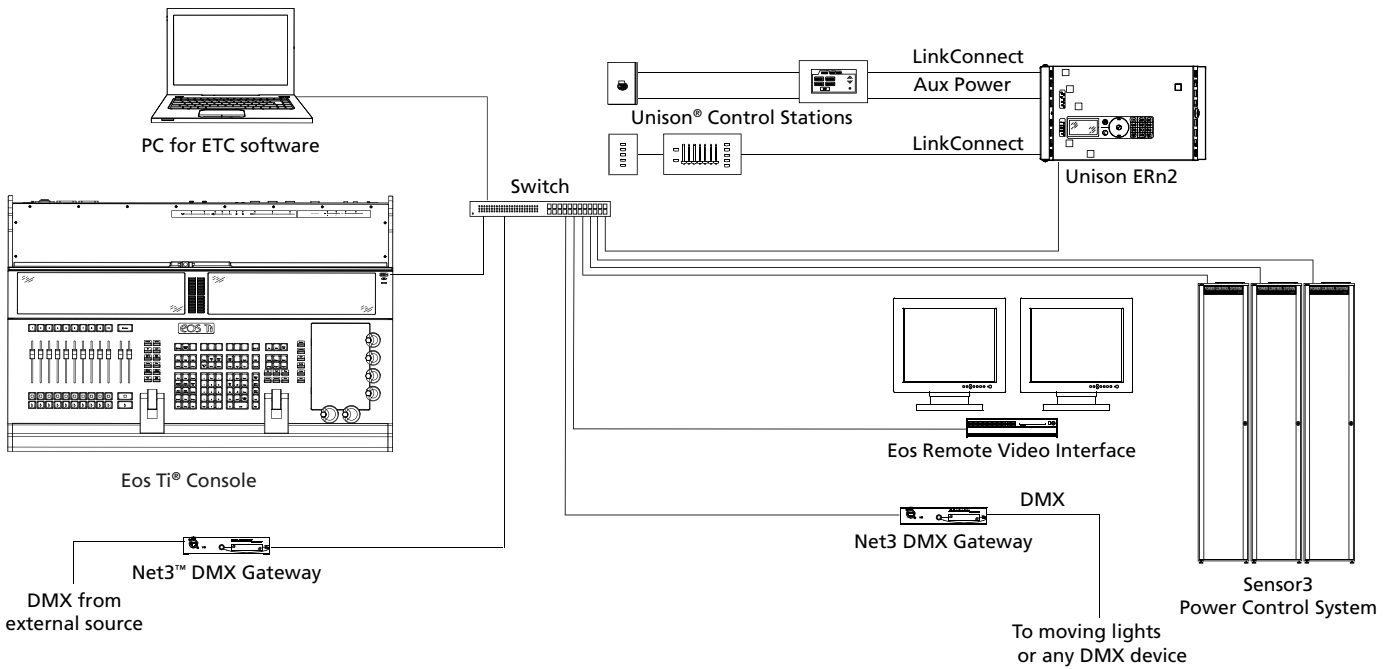*dBA values for each Sensor enclosure measured at one meter. Visit www.etcconnect.com for full spectrum dBA ratings.

**ESR-12 enclosures have a fixed speed fan. dBA values for the ESR-12 enclosure are listed without (left) and with (right) a Sensor Sound Suppression hood (SSSh)

SENSOR ENCLOSURES CONNECTED TO ECHO CONTROL STATIONS

EchoConnect - Belden 8471 + (1) 14 AWG ESD Ground Wire

TYPICAL SYSTEM RISER

PC for ETC software

LinkConnect
Aux Power
Unison® Control Stations
LinkConnect
Unison ERn2

Switch

Eos Ti® Console

Eos Remote Video Interface

DMX
Net3 DMX Gateway

Net3™ DMX Gateway

DMX from
external source

To moving lights
or any DMX device
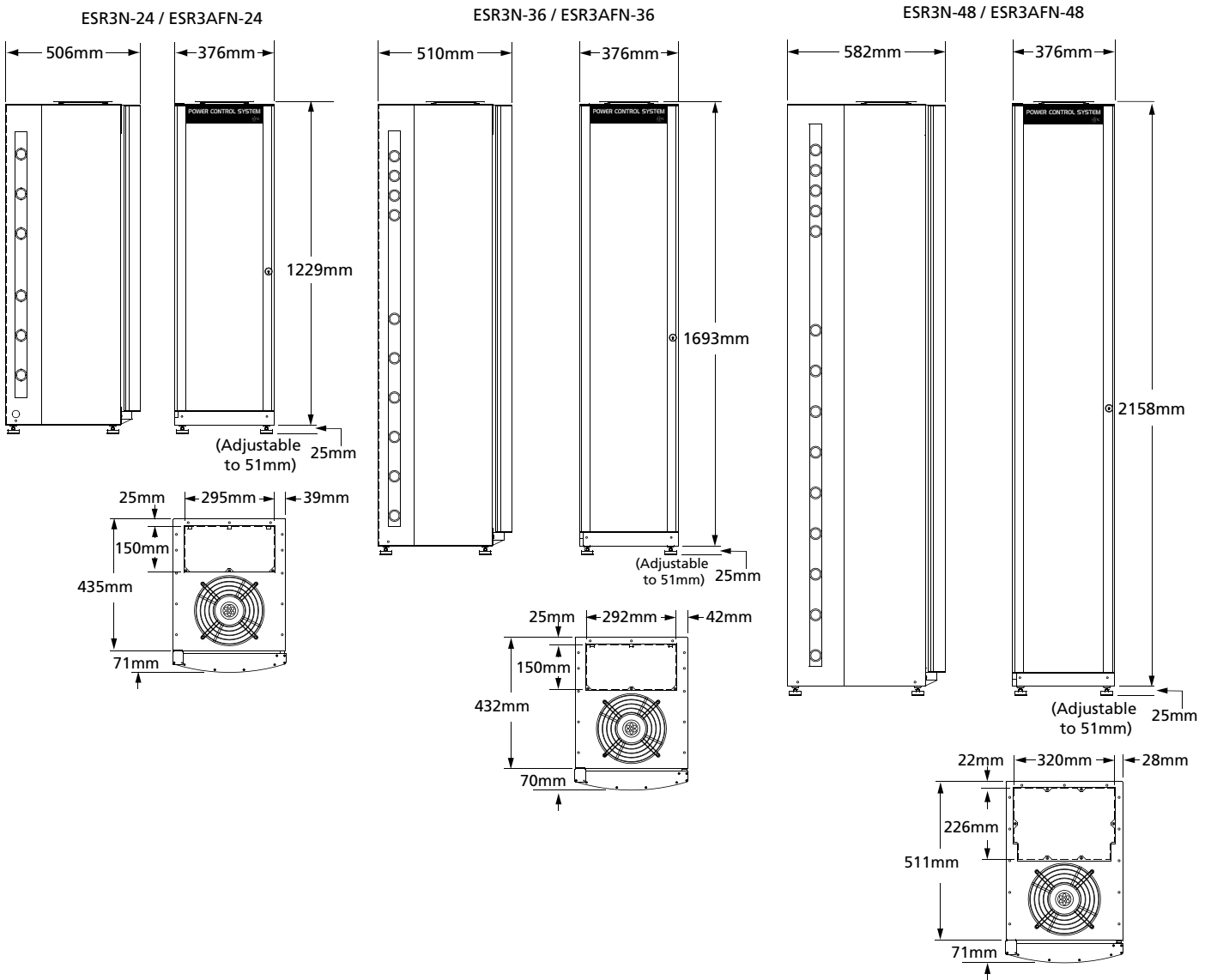
Sensor3
Power Control System

PHYSICAL

Power Enclosure Dimensions and Weights

MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT EMPTY	WEIGHT WITH MODULES	SHIPPING WEIGHT
ESR3-48	2158 mm	376 mm	582 mm	126 kg	Approx. 230 kg	250 kg
ESR3-36	1693 mm	376 mm	510 mm	92 kg	Approx. 180 kg	195 kg
ESR3-24	1229 mm	376 mm	506 mm	69 kg	Approx. 130 kg	140 kg
ESR3-12	655 mm	376 mm	427 mm	34 kg	Approx. 65 kg	75 kg

ESR3N-24 / ESR3AFN-24

ESR3N-36 / ESR3AFN-36

ESR3N-48 / ESR3AFN-48

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