ETC

Unison® ERn External Control Enclosure

Unison Control Series

GENERAL INFORMATION

With the ERn enclosure, you choose the features you need for your facility's unique lighting and building-control requirements: processing, station support, power options, and networking. By isolating core components as a module, we optimize the system's longevity and performance. Compact external control enclosures available in two sizes: ERn2 and ERn4.

APPLICATIONS

- Houses of worship
- Hotels
- Resorts
- Convention centers
- Theaters
- Schools
- Restaurants
- Theme parks
- Cruise ships

FEATURES

- LinkConnect: using Echelon® LonTalk® protocol with LinkPower, the two-wire topology-free system gives you the freedom to put stations where you need them
- Use of low–cost, easy-to-install Cat5/5e cable with PoE to connect touchscreen stations and other devices to a networked Paradigm® system
- Optional 5-port Power Over Ethernet (PoE) Ethernet Switch*
- Optional Redundant Rack Power Supply*
- Wall-mount or 19" equipment rack-mount

*Option module required

Options and Accessories

MODEL	DESCRIPTION
ERn-Net*	ERn Ethernet Switch with Power over Ethernet
ERn-RPS	ERn Redundant Power Supply
URTO	Unison RideThru Option
UBPO*	Unison BatteryPack Option

*For use with wall-mount ERn enclosures only

ORDERING INFORMATION

100-120 Volt ERn Enclosure

MODEL	DESCRIPTION
ERn2-W-__[1]	Single Processor Control Enclosure-Wall Mount
ERn2-RM-__[1]	Single Processor Control Enclosure-Rack Mount
ERn4-W-__[1]	Dual Processor Control Enclosure-Wall Mount
ERn4-RM-__[2]	Dual Processor Control Enclosure-Rack Mount
ERn4-W-__-S[1,3]	Single Processor Enclosure -Wall Mount with P-TS7 opening

[1] Available for 100, 120 230CE and 240 volt options. Enter desired voltage in blank space when ordering. Example: ERn4-W-120

[2] Available for 100, 120 and 240 volt options for UL markets. Enter desired voltage in blank space when ordering. Example: ERn4-W-120

[3]P-TS7 purchased separately

Control Module Options

MODEL	DESCRIPTION
P-ACP	Paradigm Architectural Control Processor

Option Modules

MODEL	DESCRIPTION
P-SPM	Paradigm Station Power Module
P-REP*	Paradigm Station Repeater Module
P-DREP*	Paradigm Dual Station Repeater Module
ERn-BM	ERn Blank Module

*For use with ERn4 only

ETC®

SPECIFICATIONS

GENERAL
- External Processing Enclosure designed for one ERn2 or two ERn4 control processors plus options and accessories
- Full two-year warranty

MECHANICAL
- 18-gauge formed steel construction
- Fine-texture, scratch-resistant epoxy paint
- Wall-mount and 19"rack-mount variants
- Convection-cooled
- Locking door with limited access to control processor
- Tool-free module removal and installation
- 19" equipment-rack mount offers connectorized rear panel for all wiring connections
- Wall-mount offers front access wiring terminations
- Top, bottom and side knockouts for conduit entry
- Optional variant with field installed Touchscreen Control Station

ELECTRICAL
- External control enclosure rated for 100, 120V, 230V CE oe 240VUL single phase configurations, 3.5A maximum draw at 120V
- Completely pre-wired by the manufacturer
- Designed to support the following wire terminations
  - AC (single phase)
  - 24VDC (2-16AWG)
  - LinkConenct®
  - Two configurable DMX512A ports
  - RS232 Bi-directional serial
  - Cat5/5e UTP Ethernet
  - Contact I/O, 4in/4out (14-26AWG)
    · Contact output rated 1A at 30vDC
- Contractor-supplied input and control wiring
- Factory-provided connectors for wiring terminations
- UL and cUL Listed

THERMAL
- Ambient room temperature: 0-40°C / 32-104°F
- Ambient humidity: 10-90% non-condensing

RACK OPTIONS AND ACCESSORIES

CONTROL PROCESSORS
- Paradigm Architectural Control Processor (P-ACP)

STATION POWER MODULES
- Station Power Module (P-SPM)
  - Provides Echelon LinkPower for up to 32 stations
  - Provides 24V auxiliary power for interface and touchscreen stations
  - Provides 1640 feet (500 meters) of station bus from the ERn enclosure
- Station Bus Repeater (P-REP)
  - Extends station bus length by an additional 1640 feet (500 meter) segment
  - Accommodates up to 30 additional stations (maximum 62 stations per Processor)
  - Wall- and rack-mount versions available for mid-span insertion
- Station Bus Dual Repeater (P-DREP)
  - Extends the station network bus by two additional 1640-foot (500-meter) segments
  - Accommodates up to 30 additional stations (maximum 62 stations per processor)
  - Wall- and rack-mount versions available for mid-span insertion
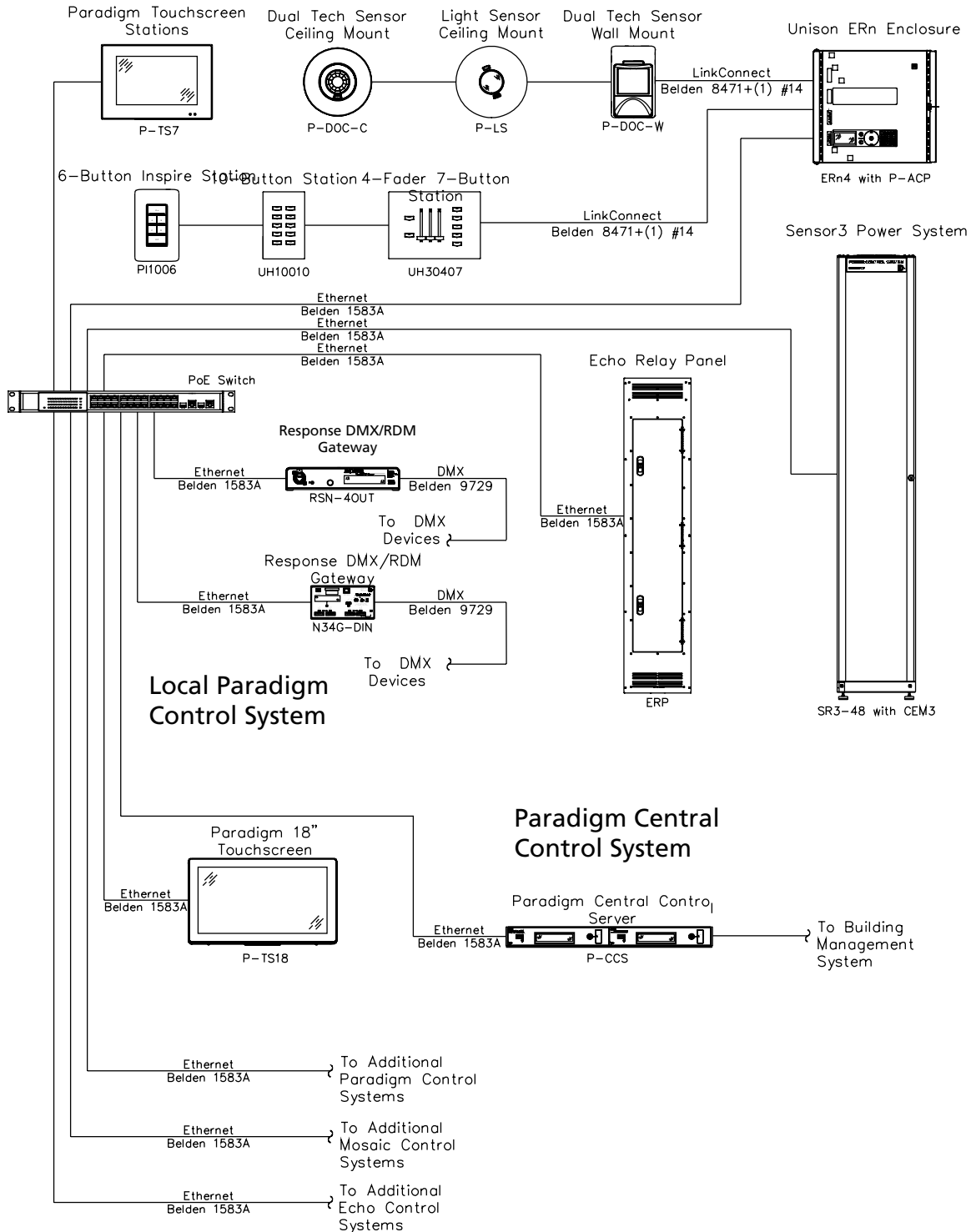
OPTION MODULES
- Ethernet Switch (ERn-NET)
  - Five-port Ethernet switch with four ports supplying Power over Ethernet (PoE)
  - 100BaseTX 802.3af PSE compliant
  - For use in wall-mount ERn only
  - Not compatible with ERn4-W-__-S
- Redundant Power Supply (ERn-RPS)
  - Seamless power for control processors upon failure or removal of the primary power supply
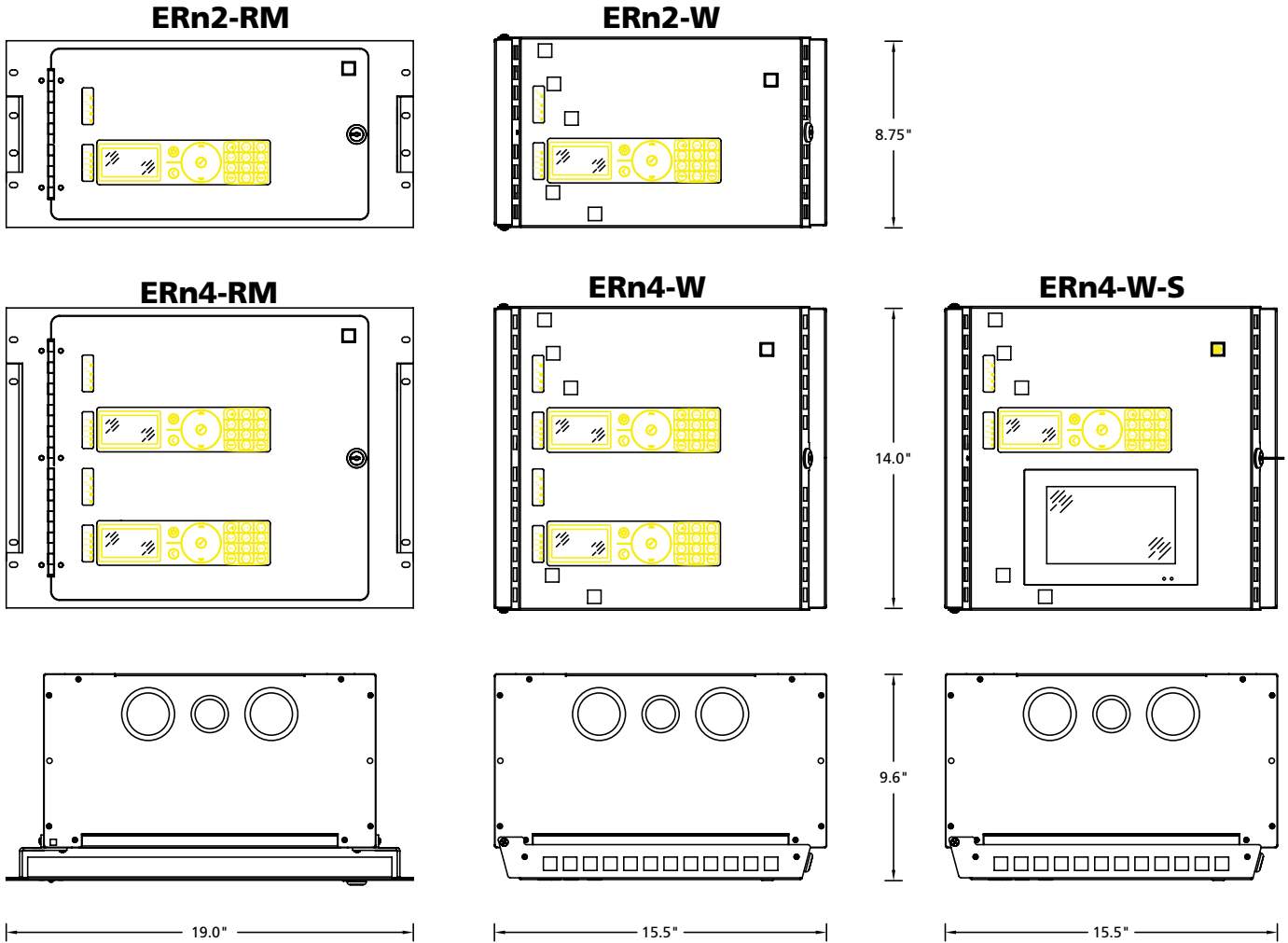 - Front-panel indicator for RPS status

ACCESSORIES
- Unison RideThru Option (URTO)
  - Short-term power backup of control electronics for at least 10 seconds during short power outages
  - Automatically engages when power is lost
  - Recharges during normal power operation
- Unison Battery Pack Option (UBPO)
  - Long-term power backup of control electronics for at least 90 minutes
  - Automatically engages when power is lost
  - Recharges during normal power operation

TYPICAL SYSTEM RISER – PARADIGM CONTROL

Paradigm Touchscreen Stations
P-TS7

Dual Tech Sensor Ceiling Mount
P-DOC-C

Light Sensor Ceiling Mount
P-LS

Dual Tech Sensor Wall Mount
P-DOC-W

LinkConnect
Belden 8471+(1) #14

Unison ERn Enclosure
ERn4 with P-ACP

6-Button Inspire Station
PI1006

10-Button Station
UH10010

4-Fader 7-Button Station
UH30407

LinkConnect
Belden 8471+(1) #14

Sensor3 Power System

Ethernet
Belden 1583A
Ethernet
Belden 1583A
Ethernet
Belden 1583A

PoE Switch

Echo Relay Panel

Response DMX/RDM Gateway
RSN-4OUT

Ethernet
Belden 1583A

DMX
Belden 9729

To DMX Devices

Ethernet
Belden 1583A

Response DMX/RDM Gateway
N34G-DIN

Ethernet
Belden 1583A

DMX
Belden 9729

To DMX Devices

Local Paradigm Control System

ERP

SR3-48 with CEM3

Paradigm Central Control System

Paradigm 18" Touchscreen
P-TS18

Ethernet
Belden 1583A

Paradigm Central Control Server
P-CCS

Ethernet
Belden 1583A

To Building Management System

Ethernet
Belden 1583A

To Additional Paradigm Control Systems

Ethernet
Belden 1583A

To Additional Mosaic Control Systems

Ethernet
Belden 1583A

To Additional Echo Control Systems

PHYSICAL

ERn2-RM

ERn2-W

8.75"

ERn4-RM

ERn4-W

ERn4-W-S

14.0"

9.6"

19.0"

15.5"

15.5"

ERn Dimensions*

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
ERn2-W	8.75	223	15.5	394	9.6	244
ERn2-RM	8.75	223	19.0	483	9.6	244
ERn4-W/ W-S	14.0	356	15.5	394	9.6	244
ERn4-RM	14.0	356	19.0	483	9.6	244

ERn Weights*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
ERn2-W	15	6.80	20	9.08
ERn2-RM	20	9.07	21	9.53
ERn4-W/ W-S	20	9.07	25	11.34
ERn4-RM	25	11.34	29	13.15

*Weights and dimensions typical