

**GENERAL INFORMATION**

Unison ER Series brings the power of Unison control to your distributed Unison, Sensor or other DMX-512 dimming system.

- APPLICATIONS**
- Churches
  - Hotels
  - Convention Centers
  - Theatres
  - Schools
  - Restaurants
  - Theme Parks

- FEATURES**
- Low profile rack
  - Fully pre-wired
  - Easy installation, configuration and operation
  - Scalable modular processing
  - Rack mount options

- GENERAL**
- 100, 120, 230 and 277 Volt systems
  - Ambient Temperature: 32-104°F/0-40°C
  - Ambient Humidity: 30-90° (non-condensing)
  - UL and cUL LISTED, CE Marked

**ORDERING INFORMATION**

**100-277 Volt - ER Racks**

Model#	Description
ER4-100	Surface mount - 100V External Processing Rack
ER4-120	Surface mount - 120V External Processing Rack
ER4-230	Surface mount - 230V External Processing Rack
ER4-277	Surface mount - 277V External Processing Rack

**Control Modules**

Model#	Description
CME	Extended Architectural Control Module
CMEi	Extended Architectural Control Module w/ Network Connection

**Options and Modules**

Model#	Description
REP	Repeater Option Module
AIR	Blank Air flow Option Module

**Accessories**

Model#	Description
RM 5C	19" Rack Mount Kit-5C
RM BL	19" Rack Mount Kit-Black

## SPECIFICATIONS

<b>GENERAL</b>	<p>External Processing Rack (ER4) houses the architectural control processor and option modules</p> <p>Provides architectural lighting control for Unison, Sensor, and other DMX512 dimming racks</p> <p>Ambient room temperature: 0-40°C / 32-104°F</p> <p>Ambient humidity: 30-90% non-condensing</p> <p>All racks UL and cUL LISTED</p>
<b>MECHANICAL</b>	<p>18 gauge formed steel panels</p> <p>Fine-textured, scratch resistant, epoxy paint</p> <p>ER4 may be wall mounted, or rack mounted when installed with the Rack mount kit (RM 5C)</p> <p>Top, bottom, and side knockouts facilitate conduit entry</p> <p>Full height hinged locking door</p> <p>No tools required for module removal or installation</p> <p>Front access to all wiring and terminations</p>
<b>ELECTRICAL</b>	<p>External Processing Racks are available in 100-120, 230 and 277 volt, single phase configurations.</p> <p>Completely pre-wired by the manufacturer</p> <p>Designed to support the following wire terminations:</p> <ul style="list-style-type: none"><li>AC (single phase)</li><li>Echelon Link Power 24VDC</li><li>DMX512 In</li><li>DMX512 Out</li><li>RS232 Serial In/Out</li><li>Category 5 UTP(CMEi only)</li><li>Multi-Mode Fiber Optic with ST Connector (CMEi only)</li></ul> <p>Contractor supplies the input and control wiring</p> <p>All control wire terminations are terminated via the factory provided connectors.</p>

## CONTROL MODULE VARIANTS

CME – Control module with station processor

CMEi – Control module with station processor and network connections

The CM contains a nine button membrane overlay and a two line by 20 character LCD for system configuration, testing and diagnostics.

The architectural station processor (E) accepts Echelon Link Power control signals from the Unison control stations and remote interfaces.

The Link Power network utilizes a polarity-independent, low-voltage Class II twisted pair wiring.

Belden type 8471 (unshielded) or Belden 8719 (shielded) or equivalent and (1) #14 ESD drain wire (drain wire not required for systems installed in metal conduit).

Network wiring may not exceed 1500' (500m) without the use of a repeater (REP). The repeater option module increases network wire length in increments of 1500' (500m).

Control wiring terminates in the ER rack via provided connectors.

Architectural station processors require a Light Manager system configuration

Station configuration and program information are stored in non-volatile flash memory.

A 3.5" floppy disk drive is used to facilitate loading of station configuration into the system processor. (CME & CMEi)

CMEi control modules allow connection to an Ethernet network for system configurations and monitoring, via Cat 5 or Fiber Optic

The architectural processor controls 512 dimmers, 512 zones with 32 wall stations - 4 LCD stations maximum.

A Repeater option module (REP) may be used to increase station count in increments of 32.

## OPTION MODULE

Option modules are housed in a formed steel body and require no discrete wire connections.

Tool free insertion and removal

Option module variants include:

REP – Repeater Option module, which provides:

- Repeated Link Power and 24VDC control power
- Adds 1500' (500m) to the total potential wire run
- Powers additional 32 wall stations
- Powers 4 LCD or PC interface stations

AIR – Airflow Option modules are required for any empty option module space in the ER4 enclosure.

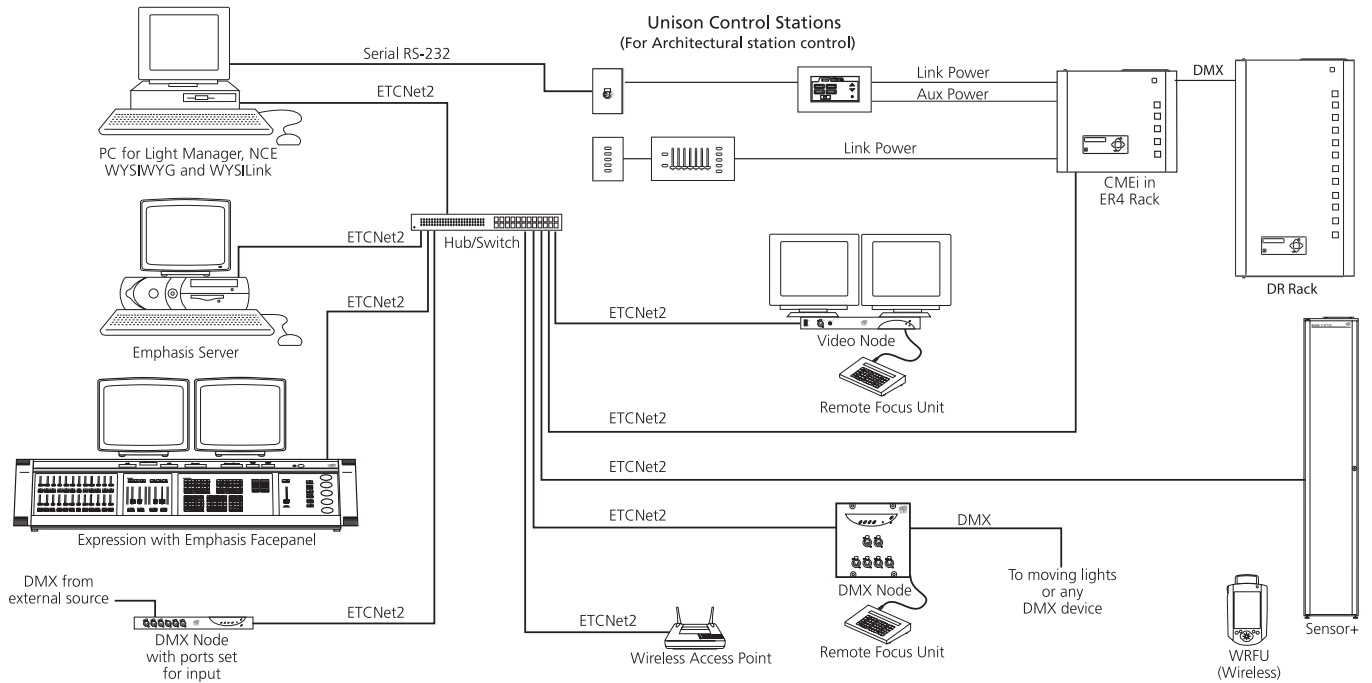
## ACCESSORIES

A 19' rack mount kit (RM 5C) also available

# Unison® External Processing Rack

## ER Series

### UNISON CONTROL



### WIRING

#### Wiring Specification

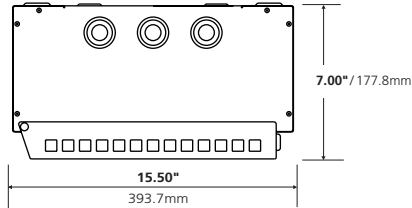
Description	Specification	Maximum Length
Unison Link Power (PLP)	Belden 8471	1640' (500m)
AUX Power	(2) #16AWG	
ESD Ground	(1) #14AWG	
DMX	(1) Belden 9729	1640' (500m)
ETCNet2	(1)CAT5-UTP	328 Ft (100m)

# Unison® External Processing Rack

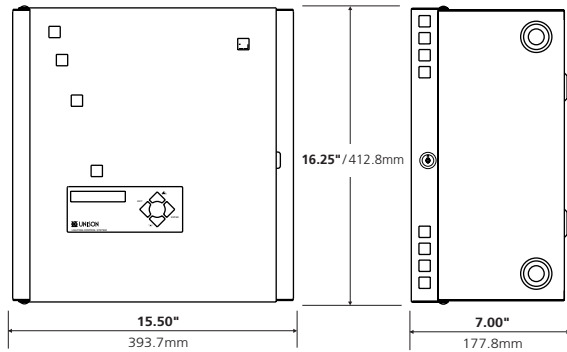
## ER Series

### ER 4 Wall Mount

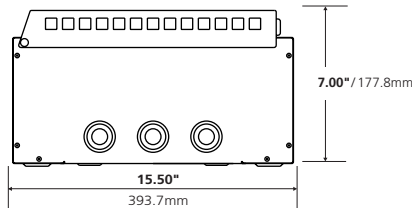
TOP VIEW



FRONT VIEW

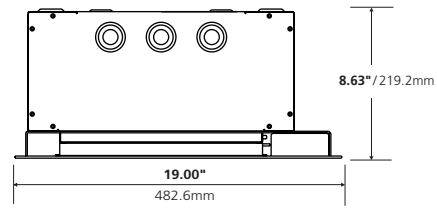


BOTTOM VIEW

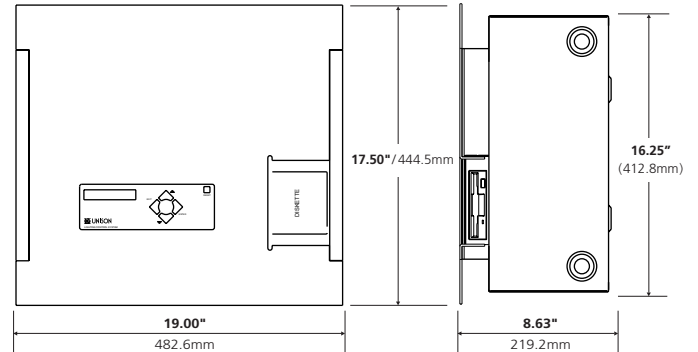


### ER 4 Rack Mount

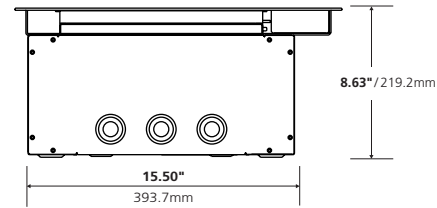
TOP VIEW



FRONT VIEW



BOTTOM VIEW



### DIMENSIONS

#### Rack Dimensions

Model	Height		Width		Depth	
	inches	mm	inches	mm	inches	mm
ER4	16.25	412.8	15.5	393.7	7.0	177.8
ER4-RM	17.50	444.5	19.0	482.6	8.63	219.2

### WEIGHTS

#### Rack Weights\*—no modules

Model	Weight		Shipping Weight	
	lbs	kgs	lbs	kgs
ER4	20	9.1	24	10.9
ER4-RM	12	5.4	14	6.3

\* Weights and Dimensions typical



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