Unison® Paradigm P-ACP Series

GENERAL INFORMATION

The Paradigm Architectural Control Processor is designed for easy interaction and rapid response. The Paradigm ACP's built in memory and processing power works with vast amounts of lighting control data and is fast enough to process 1024 simultaneous fades over any of its native protocols

APPLICATIONS
- Churches
- Schools
- Restaurants
- Hotels
- Museums
- Casinos
- Ballrooms

FEATURES
- Designed for use in Unison DRd and ERn enclosures
- Point of Control Interface – easy to read system display shows the user pertinent system information
- LinkConnect – using Echelon® LonTalk® protocol with LinkPower, the two wire topology-free system gives you the freedom to put station where you need them
- NetConnect – making use of low-cost, easy to install Cat5/5e with PoE to connect touchscreen stations and other devices to a networked Paradigm System
- USBConnect – support for USB flash drives for configuration upload and download
- QuickLoad – SD Media support for upload, and backup of configuration data
- LightDesigner™ Access – Web browser interface for easy modification, activation and monitoring of your system configuration and status
- LocalAccess – user control at the interface, including creation of timed events and editing presets or sequences
- Secure-it Access Control – multiple levels of secure user access at the interface
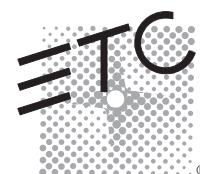
ORDERING INFORMATION

Unison Paradigm ACP

MODEL	DESCRIPTION
P-ACP	Unison Paradigm Architectural Control Processor

Unison Paradigm Accessories

MODEL	DESCRIPTION
P-DRd-TK	Unison DRd termination kit for Paradigm
P-SPM	Unison Paradigm Station Power Module
P-REP	Unison Paradigm ERn Repeater Module
P-DREP	Unison Paradigm ERn Dual Repeater Module
P-REP-W	Unison Paradigm Wall-mount Repeater
P-DREP-W	Unison Paradigm Wall-mount Dual Repeater
P-REP-RM	Unison Paradigm Rack-mount Repeater
P-DREP-RM	Unison Paradigm Rack-mount Dual Repeater

S P E C I F I C A T I O N S

MECHANICAL
- Designed for use in the Unison DRd Rack Enclosure Series and Unison ERn Control Enclosure Series
- Microprocessor based, solid state technology to provide multi-scene lighting and building controls
- Fully contained plug in module with no discrete wire connections
- Tool free installation
- Front panel user interface with backlit LCD and alpha-numeric button panel
- Support of RJ-45 Ethernet, Secure Digital (SD) and Universal Serial Bus (USB) media on the front panel

ELECTRICAL
- No discrete wiring connections required for use in a dimming or control enclosure
- Echelon® LinkPower communications with remote devices, including button stations, button/fader stations, touchscreen stations, sensors, and third party LonMARK compliant products
- Hot swapable
- System configuration and programming information stored in flash memory
- Support of ESTA BSR E1.17 Advanced Control Networks (ACN) and ESTA BSR E1.31 (sACN) Protocols
- Supports EIA-RS232 serial protocol for bi-directional command and communication with third-party equipment
- Two discrete ESTA DMX512A ports, configurable as input or output ports*
- Four dry contact closure inputs
- Four contact closure outputs, rated 1A@30VDC
- UL and cUL listed, CE marked

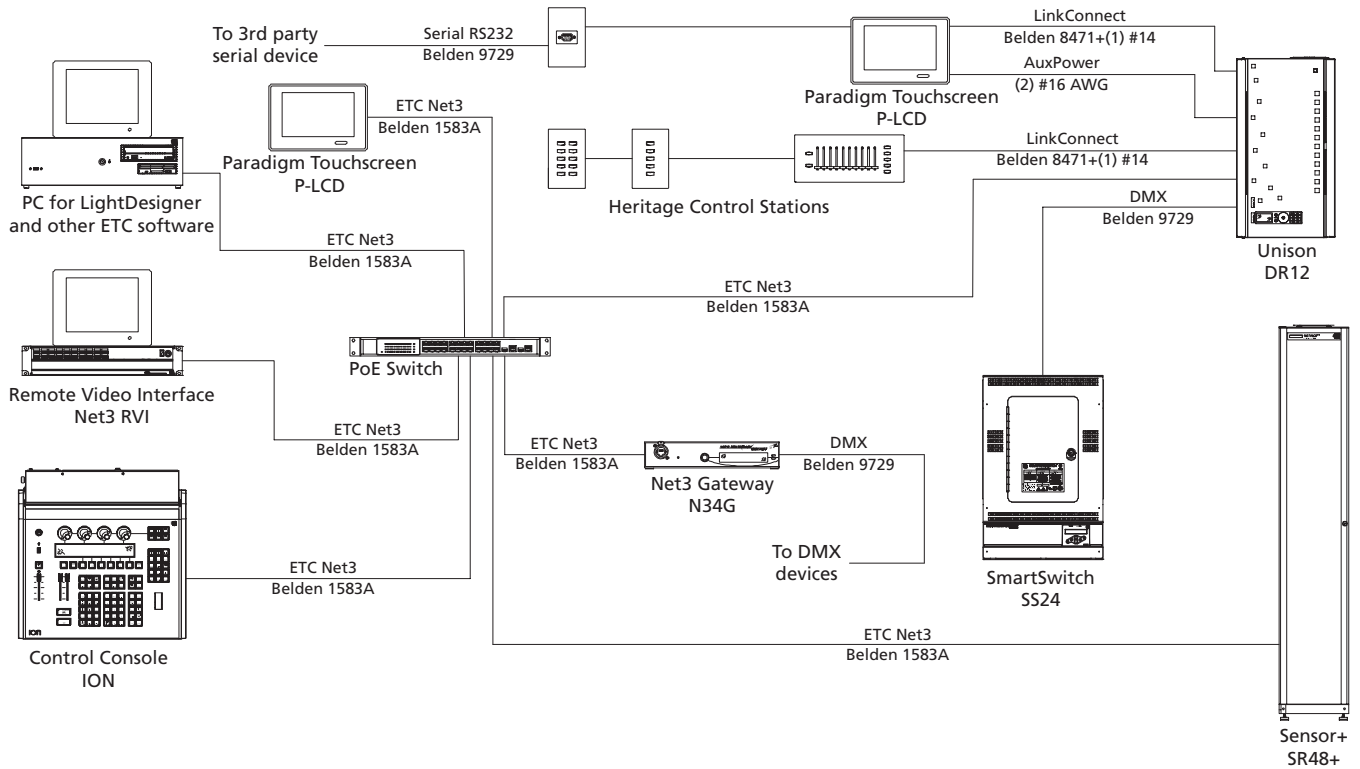*When used in a Dimming Enclosure, the second DMX port is always an output

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

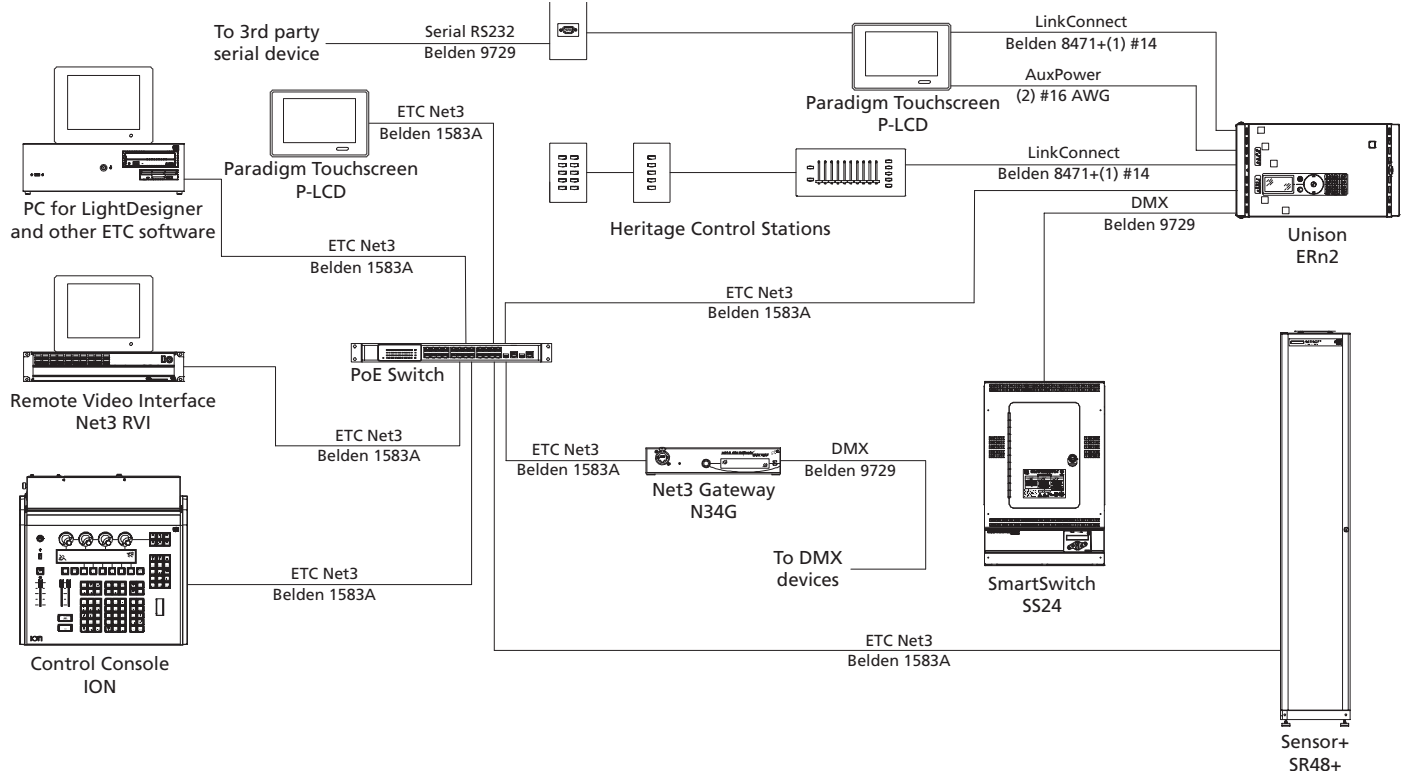## S P E C I F I C A T I O N S

FUNCTIONAL
- Capacity
  - Supports 1024 channels of control per control processor
  - Supports up to 62 stations per control processor
- System
  - Net3 system interoperability including sACN
  - Network Time Protocol for real-time clock synchronization
  - Supports 2 physical DMX ports, each configurable as an input or output*
  - Provides configuration of DRd dimming operations
  - Up to 20 control processors per system
  - Addition of processors to a system proportionately increases the overall capacities
- Serial Input/Output
  - 8-bit word length, parity selection and 1 or 2 stop bits
  - Fully customizable input and output messages
  - Bi-directional
- Configuration Data
  - Remote upload from a connected PC running LightDesigner or another connected Paradigm ACP
  - Stored in removable solid state memory for easy transfer to another Paradigm ACP
- Local User Interface
  - Control functionality for control channels, zones, fixtures, groups, presets, macros, walls and sequences
  - Ability to schedule timed events (add/edit/delete)
  - Transfer of configuration using removable media
  - Transfer of configuration to and from touchscreen stations using removable media
- User Access Controls
  - 2 User accounts - Administrator and User, local to each processor
- Web User Interface
  - Internal web server accessible via Ethernet port
  - Activate and deactivate presets
  - Schedule timed events (add/edit/delete)
  - Displays status information and log files
  - Configuration of processor settings
- Diagnostics
  - Standard and Critical Event logging
- Stations
  - Connected to a Paradigm processor via topology-free LinkConnect, or star-topology NetConnect
  - Discovery and binding accomplished from the local user interface or LightDesigner
- Operation
  - Configurable DMX output refresh rate
  - Support for 16-bit DMX attributes
  - User configurable arbitration for multiple internal and external source data
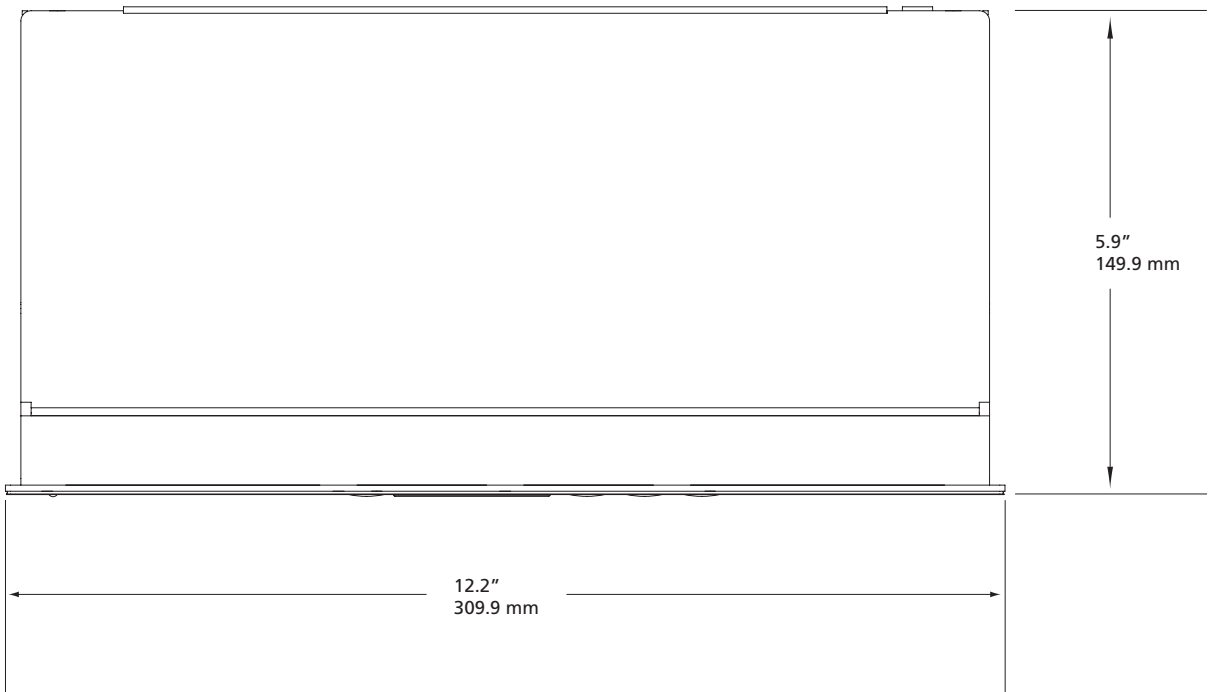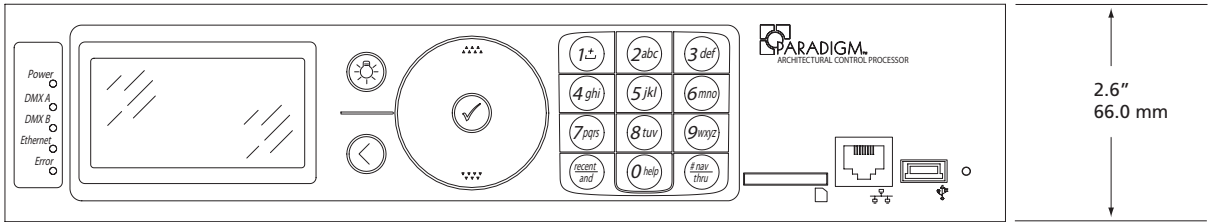
TYPICAL SYSTEM RISER – DRd WITH PARADIGM CONTROL

To 3rd party serial device

Serial RS232
Belden 9729

LinkConnect
Belden 8471+(1) #14

AuxPower
(2) #16 AWG

Paradigm Touchscreen
P-LCD

LinkConnect
Belden 8471+(1) #14

DMX
Belden 9729

Unison
DR12

ETC Net3
Belden 1583A

Paradigm Touchscreen
P-LCD

Heritage Control Stations

ETC Net3
Belden 1583A

PC for LightDesigner
and other ETC software

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

PoE Switch

Remote Video Interface
Net3 RVI

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

DMX
Belden 9729

Net3 Gateway
N34G

To DMX
devices

SmartSwitch
SS24

Control Console
ION

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

Sensor+
SR48+

TYPICAL SYSTEM RISER – ERn WITH PARADIGM CONTROL

To 3rd party serial device

Serial RS232
Belden 9729

LinkConnect
Belden 8471+(1) #14

AuxPower
(2) #16 AWG

Paradigm Touchscreen
P-LCD

LinkConnect
Belden 8471+(1) #14

DMX
Belden 9729

Unison
ERn2

ETC Net3
Belden 1583A

Paradigm Touchscreen
P-LCD

Heritage Control Stations

ETC Net3
Belden 1583A

PC for LightDesigner
and other ETC software

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

PoE Switch

Remote Video Interface
Net3 RVI

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

DMX
Belden 9729

Net3 Gateway
N34G

To DMX
devices

SmartSwitch
SS24

Control Console
ION

ETC Net3
Belden 1583A

ETC Net3
Belden 1583A

Sensor+
SR48+

PHYSICAL

P-ACP Dimensions*

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
P-ACP	2.6	66	12.2	310	6.0	150

P-ACP Weights*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
P-ACP	3.8	1.72	4.8	2.18

*Weights and dimensions typical