



EC21 DIMMER RACK



With a major performance upgrade for EC21 dimmer racks, the new processor delivers a new level of connectivity to EC21 systems. A new front panel design with integral Ethernet port, together with an integral 4 port ethernet switch makes connection simple. Two DMX512 inputs are standard with the second input available for use as an RS485 port supporting our Vision.net control system.

The new design includes innovative new technologies to improve system setup and performance. A highly accurate mains waveform detection system ensures smooth dimming regardless of the condition of the incoming power. Simplifying installation, automatic voltage sensing reads the incoming phases and automatically populates pre-determined configuration fields, while color coded connectors speed the connection of conventional control signals. Diagnostic events are instantaneous, ensuring systems run smoothly and efficiently. The rack processor, utilizing distributive processing, enhances and simplifies control for architectural and systems applications, providing reliable, secure and scalable control at a realistic cost.



EC21 DIMMER RACK

FEATURES

- Dual 2.4kW and Single 5kW IGBT fully reporting dimmer modules with 650ms rise time
- Dual 2.4kW SSR dimmer modules with 200ms or 435ms filter chokes
- Single 6kW and 12kW SSR dimmer modules
- Range of power thru modules available with optional reporting features
- Contactor modules available to control a wide range of loads
- IGBT and SSR modules may be mixed in the same rack
- Standard 50,000 AIC fault current rating with optional 100,000 AIC available
- Advanced Control Electronics processor features a front panel ethernet connection
- Multi Industry standard ethernet protocol support including ShowNet, Art-Net and streaming DMX over ACN (sACN)
- Built in ethernet switch to link multiple racks
- Web browser configuration
- Dual DMX512 inputs with full patching
- Vision.net architectural control
- Dual electronics with full tracking back-up available
- ETL and cETL marked

BENEFITS

- Plug-in modular dimmer system
- Racks available for 24 and 48 modules
- Universal processor for 120V and 230V systems
- Automatic mains calibration and setup
- A highly accurate mains waveform detection system ensures smooth dimming regardless of the condition of the incoming power
- Dual processor option with full tracking back-up available
- Built-in ethernet input port to aid installation
- Wide range of ethernet protocols supported
- Integrated Vision.net architectural control
- Retrofits to existing EC21 dimmer racks
- 2 year limited warranty



EC21 DIMMER RACK

CAPACITY

Full rack	48 dimmer modules
Half rack	24 dimmer modules
Supply voltage	90-260V, 3 phase up to 800 amps

MAX CURRENT (PER PHASE)

120V

230V

48 module rack	800A	800A
24 module rack	800A	400A

ENVIRONMENT

°C

°F

Operating temperature	1-40°C ambient	°F
Storage temperature	-40-70°C	°F
Operating humidity	5-95% non-condensing	
In transit hock resistance	40G 10mS in any of the X, Y, Z planes	

CONNECTIONS

Busbar rating	50,000 AIC standard or 100,000 AIC optional	
Control circuit isolation	Optical isolation between high voltage and control electronics is 2500VAC. Control inputs are opto-isolated from the processor at 2500VAC, offering double optical isolation between the controller and high power circuits	
Connections	Ethernet CAT5e (RJ45)	
DMX12 inputs	2 DMX512 inputs standard; 2nd input available f.,or use as RS485 to support the Strand Vision.net architectural control system	

PHYSICALS

Finish	Black
Construction	Formed steel assembly

DIMENSIONS (H X W X D)

mm

in

48 module rack	2032 x 623 x 660	80 x 24.5 x 26
24 module rack	1448 x 623 x 660	57 x 24.5 x 26

WEIGHT

kg

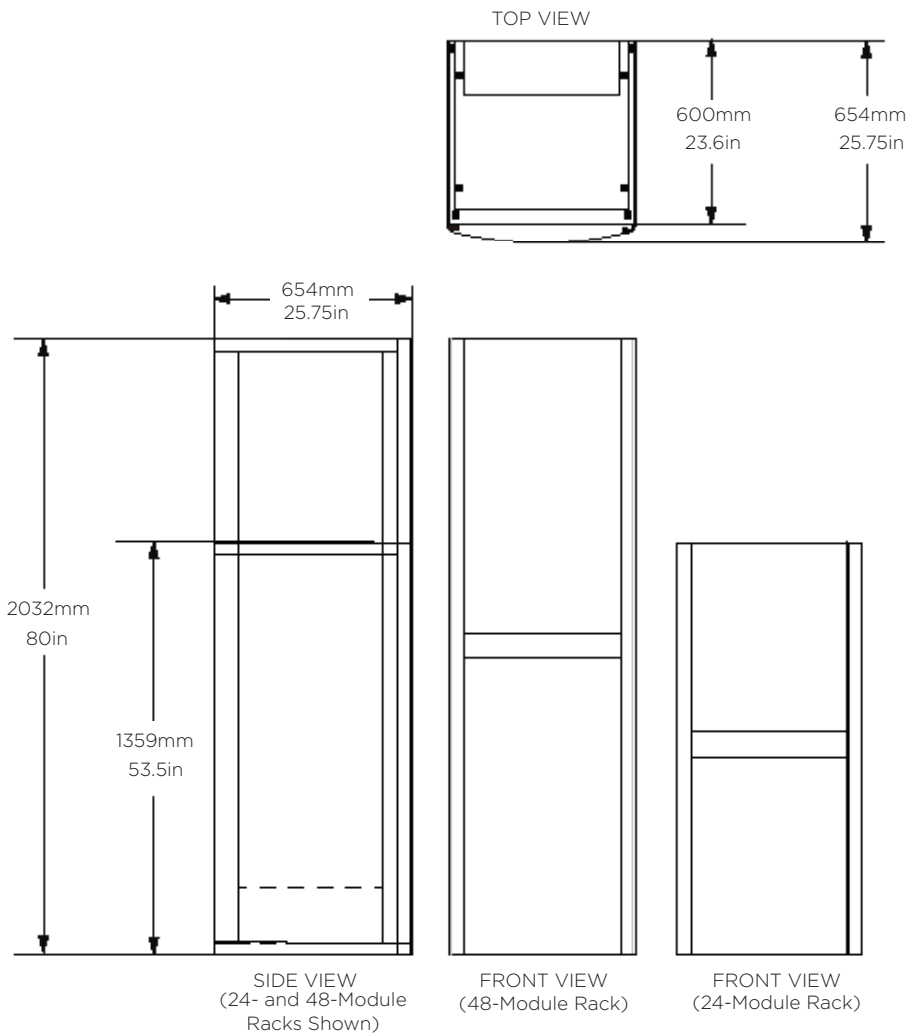
lb

48 module rack	Product	223	491.6
	Shipped	296	652.5



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24 module rack	Product	181	399.0
	Shipped	198	436.5
MARKET			
Market		230V systems	
WARRANTY & APPROBATIONS			
Warranty		2 years	
Approvals / Listings		EMC emissions to EN50081-1, EN55014; EMC immunity to EN50082-1, IEC1000-2-2; Safety: EN60950, EN60439 Part 1 (also part 12 BS5486); UL1950; CE marked	
NOTE			





EC21 DIMMER RACK

EC21 RACKS - STANDARD FEED	ORDER CODE
48 module, single bottom feed	75502/230
48 module, single bottom feed with Amp traps	75503/230
24 module, single bottom feed	75512/230
24 module, single bottom feed with Amp traps	75513/230

EC21 RACKS - BUSSED FEED	ORDER CODE
48 module, bussed bottom feed	75504/230
24 module, bussed bottom feed	75514/230

PROCESSOR ASSEMBLIES	ORDER CODE
Processor assembly with single electronics, c/w processor	76700
Processor assembly with dual electronics, c/w dual processor	76701
Spare processor 96 way	76705

ACCESSORIES	ORDER CODE
LED test board	ACETSTLED

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