

ECS-3

Power Sequencer & Conditioner





Features

- 3 Sequencer Timing Sections Fixed 3-Second Intervals, 6 Seconds Total
- 9 Total Outlets are Provided
- 6 Rear Panel Outlets are Sequenced in Three Steps
- 2 Front Panel and 1 Rear Panel Unswitched Convenience Outlets
- RFI Noise Filtering to Reduce Radio Frequency Interference
- EMI Suppression to Reduce Electromagnetic Interference
- Dual Clamping Spike & Surge Suppression, DCS Circuitry
- Front Panel Digital AC Mains Voltmeter
- LED Indication of Reversed "Live" and "Neutral" Wiring
- Abnormal AC Line Voltage Indicator for Voltages Between 102V–107V or 128V–132V
- Extreme Voltage Shutdown (EVS) Below 102V or Above 132V AC Line
- Circuit Breaker Protection @ 15A Indicated by "Breaker Open" Indicator
- Front Mounted Pull-out LED Light with 2-Position Dimmer
- Rear Mounted XLR Connector for 12VDC LED Lamp
- External Switch Sequence Trigger Activation
- External DCV Sequence Trigger Activation 5-24VDC
- 24VDC Sequence Trigger Output for Optional External AC Outlet

Applications

The ECS-3 was designed to be flexible with features that allow it to be used in a variety of applications. The sequenced outputs allow the turning of equipment on and off in a particular order, to eliminate an in rush of current and audible pops that often occur with non-sequenced power strips. It also can be used solely for protection against lightning strikes or voltage surges. If fuzzy video or frequent static pops occur, the AC power conditioning will eliminate or reduce those inconveniences. The following are just a few examples of applications the ECS-3 can be used in:

- Restaurants
- · Houses of Worship
- Schools
- Home Theaters
- · Office Buildings
- Sports Bars

General Description

The ECS-3 has been designed to meet most installation requirements for AC power distribution and equipment power protection. The 15A compact 1 RU unit features three sequential timing sections that can be activated via the unit, or remotely. Front panel activation is via a momentary switch, while rear activation is via a momentary contact closure, or by 5-24VDC trigger feed. AC Mains Voltage can be monitored via the front panel from the precision Digital Volt Meter. To light the rack, the ECS-3 has incorporated a front panel pull-out dimmable LED tube light. The rear of the rack can be illuminated by the optional 18" gooseneck LED lamp connected via an XLR style socket. LED lamps are far superior in longevity along with heat reduction when compared to traditional incandescent lamps and the XLR base mounts are also superior to the commonly used BNC type base. If a 15A AC Mains power source is not enough to meet the amperage demand of the system, the ECS-3 provides a sequenced 24VDC output that can be used to trigger other devices such as the AtlasIED ECM-20SH 20A stand alone AC power module.





Type Power Sequence, Power Conditioner & Suppressor Sequence Sections 3, Fixed Time of 3 Seconds Between "On" Seq. 2 & 3, "Off" 2 & 1 Load Rating 15A Front Panel Outlets 2 Unswitched Lights 1 Pull out LED with Dimmer Switch Activation Switch Momentary Circuit Breaker 15A Resentable Act Mains Voltmeter Three Digits Front Panel Indicator 7 Rep. Only 3 Sequencer Sections 1 / 2 / 3 Green, City 3 Anomal Voltage Indicator Red, City 1 Breaker Open Indicator Red, City 1 Breaker Death Indicator Red, City 1 <th< th=""><th>System</th><th></th></th<>	System	
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LED Light Socket XLR Socket to Provide 12VDC for Optional 18" Gooseneck Lamp LED Light Switch Two Position On / Off Grounding Terminal Hand Screw Type Terminal to Chassis Ground AC Mains Power Cord 9' (3 Meters) 14-gauge Technical Data Current Rating 15A Operating Voltage 102VAC - 132VAC Power Consumption 12 Watts High Voltage Surge Protection Trigger at 133VAC, 1 ms Typically Low Voltage Protection Trigger 101VAC, 1 ms Typically Voltmeter Accuracy \$\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{	External Voltage Activation Trigger	5-24VDC Continuous, 10mA, 2 Position Euro / Phoenix Type Connector
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Current Rating 15A Operating Voltage 102VAC - 132VAC Power Consumption 12 Watts High Voltage Surge Protection Trigger at 133VAC, 1 ms Typically Low Voltage Protection Trigger 101VAC, 1 ms Typically Voltmeter Accuracy ±1.5VAC Spike Protection Modes DCS (Dual Clamping Suppression) Circuitry on Incoming AC Mains and Each Sequential Section Output Minimum Spike Clamping Voltage 460 VRMS @ 3,000A Maximum Spike Clamping Voltage 6,000V Maximum Spike Clamping Resp. Time 1 Nanosecond Spike Clamping Voltage @ 100A 1250Vp for 20µs	AC Mains Power Cord	9' (3 Meters) 14-gauge
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Maximum Spike Clamping Voltage6,000VMaximum Spike Clamping Resp. Time1 NanosecondSpike Clamping Voltage @ 100A1250Vp for 20μs	Spike Protection Modes	DCS (Dual Clamping Suppression) Circuitry on Incoming AC Mains and Each Sequential Section Output
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Spike Clamping Voltage @ 100A 1250Vp for 20μs	Maximum Spike Clamping Voltage	6,000V
	Maximum Spike Clamping Resp. Time	1 Nanosecond
Maximum Surga Current 6 500A	Spike Clamping Voltage @ 100A	1250Vp for 20µs
Maximum Surge Current 0,300A	Maximum Surge Current	6,500A
Energy Rating @ 2ms 2000 Joules	Energy Rating @ 2ms	2000 Joules
Noise Attenuation EMI/RFI Sequencer Section 1 & 2 10dB @ 10 kHz, 40dB @ 100 kHz, 100dB @ 10 MHz		10dB @ 10 kHz, 40dB @ 100 kHz, 100dB @ 10 MHz
Unit Operating Temperature Range 41° - 95°F, 5° - 35°C	Unit Operating Temperature Range	41° - 95°F, 5° - 35°C
Humidity Range 5% to 95% Relative Humidity	Humidity Range	5% to 95% Relative Humidity
Mechanical	Mechanical	
Chassis Finish Black	Chassis Finish	Black
Product Dimensions (HxWxD) 1.75" x 19" x 8.5" (45mm x 481mm x 216mm)	Product Dimensions (HxWxD)	1.75" x 19" x 8.5" (45mm x 481mm x 216mm)
Unit Weight 7.6 lbs. (3.45kg)	Unit Weight	7.6 lbs. (3.45kg)

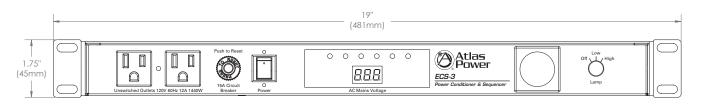


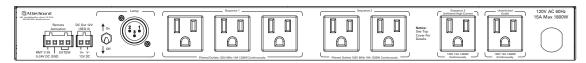


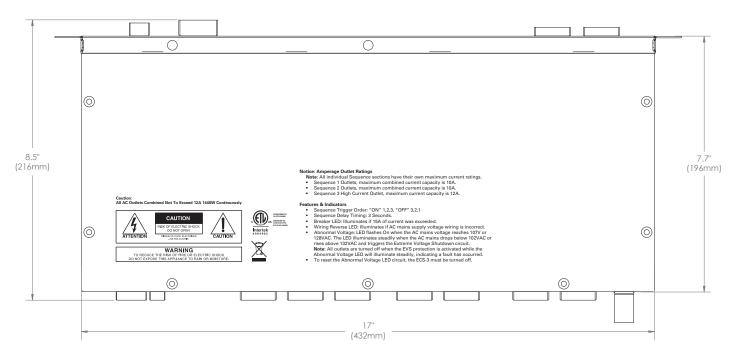
Agency Approvals	
Safety Listing	MET (UL 1449 Code)
Package Contents	
ECS-3	Qty 1



Dimensional Drawings









Architect and Engineer Specifications

The electronic control system sequencer panel and power conditioner shall be AtlasIED Model ECS-3.

The Electronic Control System Sequencer and Power Conditioning Panel shall be equipped with a front panel digital voltmeter to monitor AC mains, and LED indicators to alert the user to abnormal voltage, breaker open, wiring fault, AC fault in addition to the 3 sequence activations of the unit. Front panel shall feature a 2 position switch (Hi Lo plus off) to activate a pull out LED light. The rear panel shall be illuminated via an optional plug in lamp with a separate on/off switch for activation.

The sequencer shall be equipped for multiple modes of sequencing activation to include front panel mounted momentary switch, rear panel mounted euro-block style 4 position connector with contact closure and 5-24 Vdc External Voltage Activation trigger paralleled to Sequencer activation mode 3.The unit shall be capable of activating a remotely powered switched outlet (Model ECM-15SM or ECM-20SH) assembly via an included 24VDC output accessed on a rear mounted 2 position euroblock connector.

Power sequencer shall include 3 un-switched (2 front panel and 1 rear panel mounted) and 6 switched outlets (rear mounted) in 3 sequence activation modes. Sequence Mode 1 features 3 outlets turned on immediately on activation; sequence mode 2-after a 3 sec. delay, 2 additional outlets are turned on; sequence mode 3 after an additional 3 sec. delay a single outlet is activated for a total of a 6 second turn on sequence to minimize the in rush current draw of the connected components. Power off sequence is Mode 3 off, mode 2 off w/3sec delay, mode 1 off w/ 3 sec. delay.

Protection of incoming AC mains and Sequence 1 and 2 spike suppression shall be accomplished by DCS (Dual Clamping Spike / Surge Suppression) circuitry with 3 stage MOV protection circuits. Noise Attenuation of EMI/RFI in Sequence 1 & 2 shall be 10dB @ 10 kHz, 40 dB @ 100 kHz and 100 dB @ 10 MHz. Tested and Agency Listed MET Code (UL 1449).

Unit shall be constructed of 16 gauge CRS finished in black epoxy powder coated CRS with integrated 1 space brackets for rack mounting.

