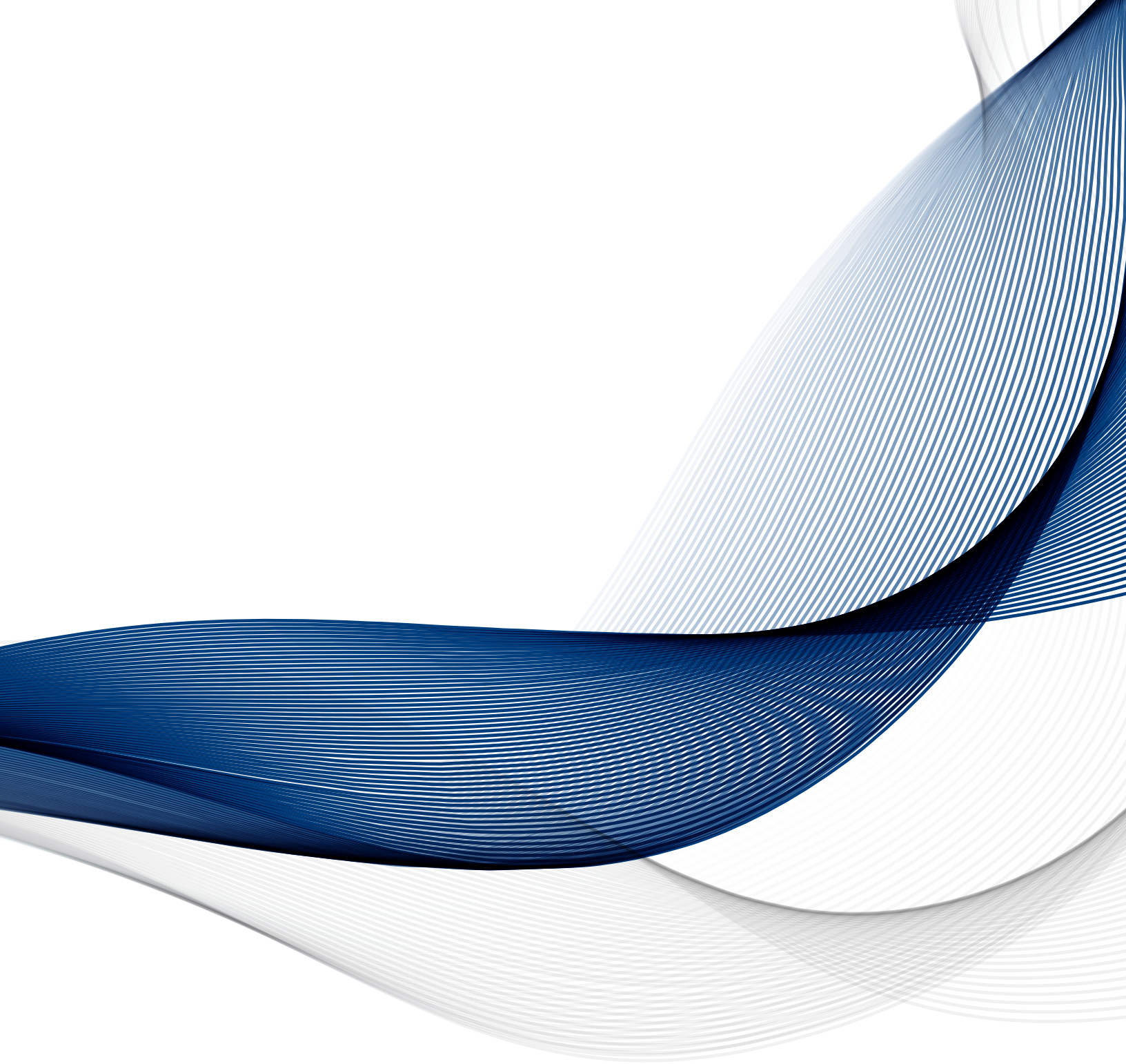




BTU RESEARCH™

SWITCHPAK PLUS SERIES

**(SWITCHPAK, AUXILIARY POWER CAPSULE AND
WEATHERPROOF ENCLOSURE, KITTED SOLUTION)**

EDS-SWPKPLUS-SR-062019A



60W
HI-POE

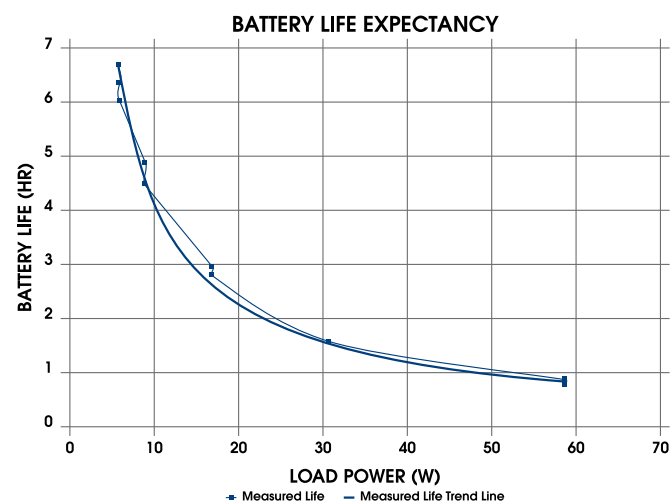
4ea
802.af/at
at ports

Internal
Battery Pack

UPS SWITCHPAK

UNINTERRUPTIBLE POWER (OVER ETHERNET) SUPPLY™

When the **UPS-POE Brownout Buddy Injector** recognizes AC power disruptions, its glitch free switching mechanism transfers the power source to an internal battery pack in picoseconds to provide undetectable and uninterrupted service of Ethernet powered devices. When combined with the **Buddy Powered Switch**, this compact pairing provides the same efficient, undetectable and uninterrupted service to multiple devices. A compact, plug and play package that takes **UPS** Anywhere, Everywhere.



PRODUCT ADVANTAGES

- Compact
- Plug and Play
- Power and UPS to multiple devices
- Highly Cost Effective
- Din Rail Mountable
- UPS Anywhere, Everywhere
- Recharges when AC power is restored
- Internal Surge Protection

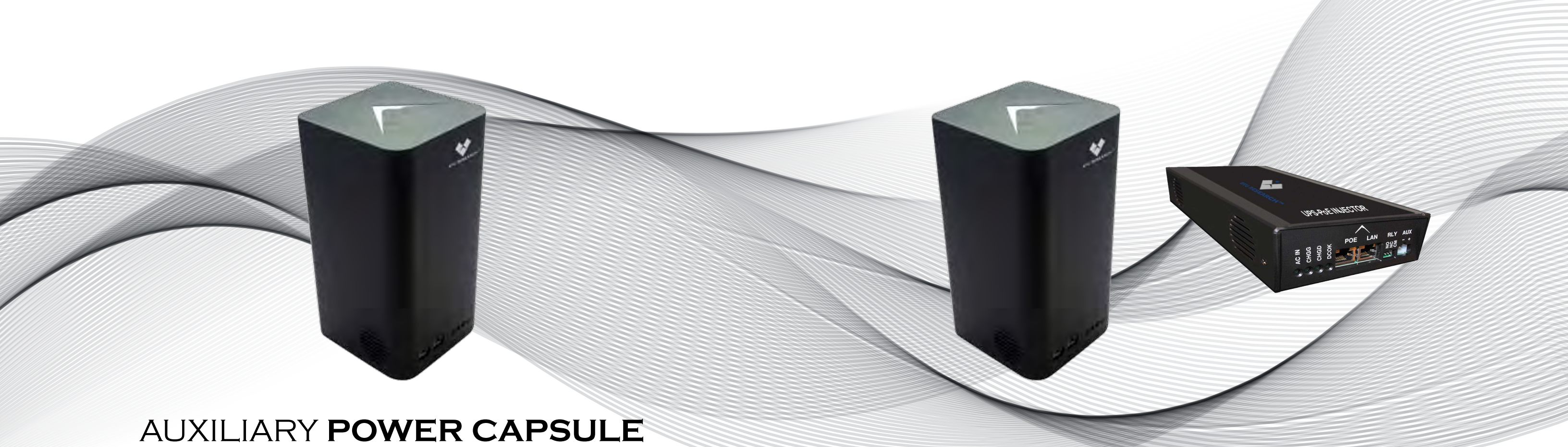
BROWNOUT BUDDY™

Main Ports	Two shielded RJ45 PoE ports: Power+Data - LAN-(in) PoE-(out)		
Auxiliary & Relay Ports	One AUX port with AMP connector for additional back up with the BTU Auxiliary Power Capsule or for use with a 24V solar converter. One RLY port with a Molex connector to dry contacts for notification of AC power status.		
LEDs (4 each)	AC Power, DC Power, Battery Charged, Battery Charging		
UPS-POE-INJECTOR SUMMARY SPECIFICATIONS			
AC Input Power	AC Input Voltage: 100VAC-264VAC		AC Frequency: 50-60Hz
Output Power/Data Throughput	BTU MODEL NUMBER	OUTPUT DCV	DATA THROUGHPUT
	BTU-UPS-UPOE 85W-G	IEEE 802.3af/at compliant	10/100/1000 Mbps
	BTU-UPS-HIPOE 85W-G	IEEE 802.3af/at compliant	10/100/1000 Mbps
Included Internal Battery Pack	24V - 3350mAh rechargeable Li-Ion		
PHYSICAL SPECIFICATIONS			
Dimensions (L X W X H)	235 x 110 x 42 mm		
Weight	850G		
ENVIRONMENTAL			
Power	AC input voltage: 100-264 VAC		AC frequency: 50-60Hz
Safety/Certifications	IEC-61000-4-2, 4-4, 4-5 ESD/EMI/EMC FCC Class B, CE, CB, UL, cUL-60950-1, EN60950-1, EMI/EMC:5502:2010 Class B		
Directive Compliance	ROHS, WEEE, REACH		
Operating	Temperature: -35° to 60° C		Humidity: 20% - 90%
Storage	Temperature: -40° to 85°C		Humidity: 20% - 90%
Vibration & Shock	10~3000Hz, 10 min/cycle, for 1 hr along each of the X,Y & Z axis, 2g-rms		
PACKAGE CONTENTS			
BTU-UPS-POE-Injector, AC Power Cord, Din Rail Mount Kit, Installation Guide			
MINIMUM REQUIREMENTS			
PoE midpoint or endpoint device, Ethernet Switch for uplink connectivity, 2 ea. Cat5e or better patch cables, Wiring Standards: EIA 568A and 568B			



THE BUDDY POWERED SWITCH

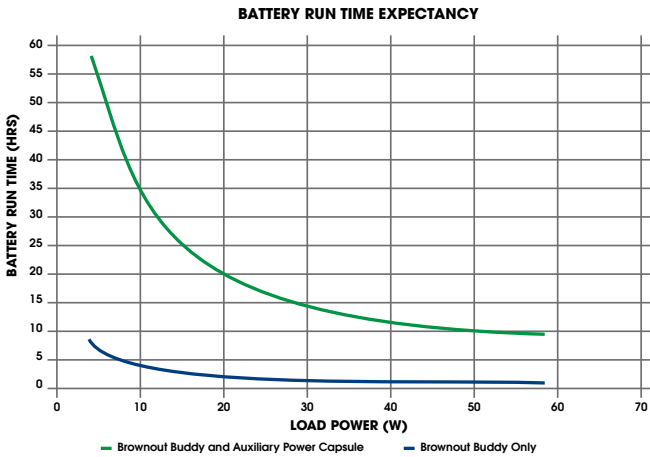
Interface	4 output ports providing 55W total power, 1 HIPOE input port, 1 adaptive port		
LED Indicators	POE Port: Link/Act, POE		RJ45 Port: Link/Act, SPD
POE SPECIFICATION			
PoE Standard	Supports both IEEE802.3af and IEEE802.3at		
Single PoE Port Power Output	Max. 15.4 watts (IEEE 802.3af)	Max. 30 watts (IEEE 802.3at)	
Auto Detect	4 PoE port auto detect af/at devices		
Power Pin Assignment	1/2+;3/6-		
Forwarding Mode	Store-and-forward		
PERFORMANCE SPECIFICATION			
Bandwith : 1.8Gbps	SRAM Buffer: 448Kbits	Forwarding Rate: 1.19Mbps@64bytes	
Mac Address Table: 1K	MTBF: 539608 hours		
PHYSICAL SPECIFICATIONS			
Product Size (W X D X H): 119 x 100 x 30 mm			Weight: 0.4kg
ENVIRONMENTAL			
Power	POE input power of 48V to 57V provided by BTU-UPS-HIPOE-60W-G Buddy		
Working Environment	Working Temperature: -40 – 80°C	Storage Temperature: -40 – 85°C	
	Working Humidity: 5% – 95% (non-condensing)	Storage Humidity: 5% – 95% (non-condensing)	
	Working high: Altitude of 3000 m (10,000ft)	Storage high: Altitude of 3000 m (10,000ft)	
Radiation	CE mark, commercial	FCC Part 15 Class B	
	VCCI Class B	EN 55022 (CISPR 22), Class B	
Standards Compliance	IEEE802.1P, IEEE802.1q, IEEE802.3az, IEEE802.3af, IEEE802.3at		
Safety	CE Mark, commercial, CE/LVD EN60950		
PACKAGE CONTENTS			
BTU-POE-SW4P with din-rail attachment			



AUXILIARY POWER CAPSULE

BTU-AP-350

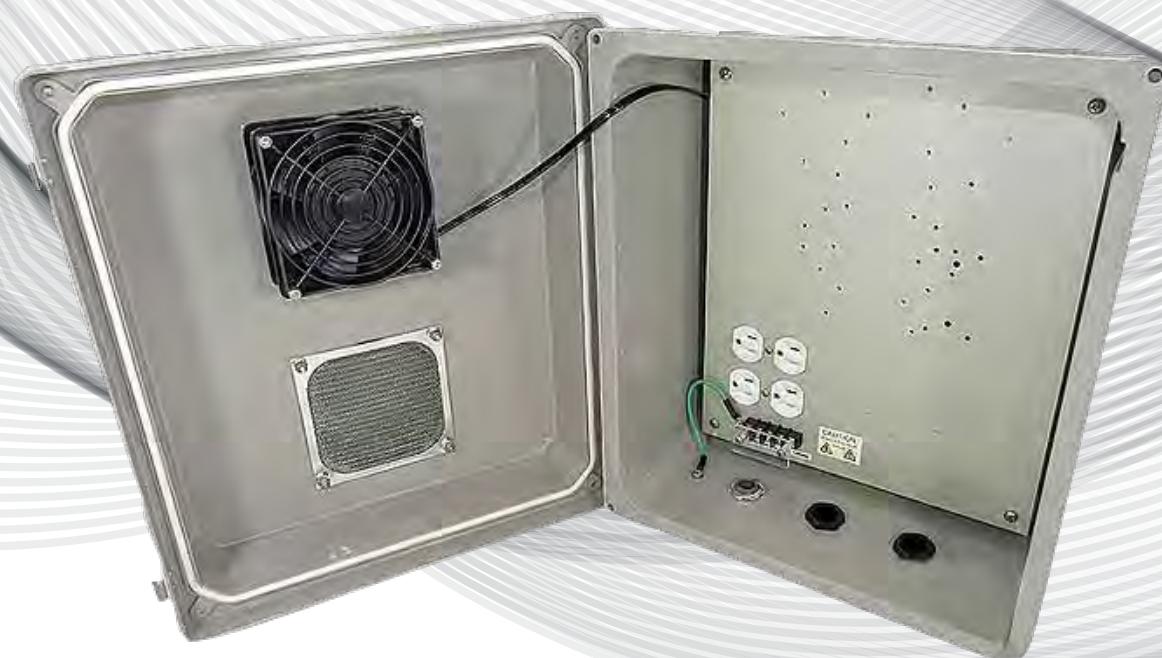
The **Auxiliary Power Capsule** provides an additional 350Wh of back-up run time capacity to the Brownout Buddy. These capsules are designed to be daisy chained. The **Auxiliary Power Capsule** is a 350Wh Li-Ion battery pack intended for use with the **Brownout Buddy™**. When connected to the Buddy's AUX port, each APC extends emergency run-time by 4 times. APCs are din rail mountable and may be positioned alongside the **Brownout Buddy™** and **Buddy Powered Switch™** to provide continuous operation of multiple IoT PoE devices. Capsules will recharge when utility power is restored. **Run-times and number of PoE devices to be constantly powered, are fully scalable.**



PRODUCT ADVANTAGES

- LED Indicators
- Provides rail-type installation method
- Fully recharges in less than 8 hours
- Battery Over-depletion protection preserves batteries and prevents over-depletion hazards
- Sub milliwatt standby power with near zero operating power losses for extreme efficiency
- Designed to be daisy chained with as many capsules as are needed
- Superior performance, successfully used in industrial field

POWER	
Input Voltage	90 to 264VAC +/- 10% 47 to 63Hz
Input Current	2.5 A MAX
DC Outage Voltage	21 to 29.4VDC
DC Output Current	3A
INTERNAL BATTERY STORAGE	
Battery Pack	28-cell (7S4P) Lithium Ion (LiCoO ₂) 18650
Pack Capacity	350WH
MECHANICAL	
Dimensions	101 x 101 x 196 mm
Weight	2.5 Kg
Mounting	Din Rail Mountable - Kit Included
ENVIRONMENT	
Operating Ambient Temperature	-10°C to 60°C
Operating Humidity	90% Non-Condensing
Storage Humidity	95% Non-Condensing
Shock/Vibration	10 to 300Hz, 10 min/cycle, for 1 hr along each of the X, Y & Z axis, 2g-rms
SAFETY AND REGULATORY COMPLIANCE	
Safety	UL 62133, CB 62133 & UN38.3



ALTELIX NF SERIES

FIBERGLASS WEATHERPROOF NEMA ENCLOSURE

The **Altelix NF Series Weatherproof NEMA Enclosures** are ideal for protecting equipment from harsh environments and tampering. Constructed from molded fiberglass reinforced polyester (FRP), these rugged enclosures can be used to protect a wide range of equipment, from wireless and wired networking devices, security equipment and building automation equipment. Model options include 12 VAC, 240 VAC and DC powered enclosures, thermostat controlled heating and cooling as well as vented versions. In addition to our standard enclosures, Altelix can provide customized enclosures to suit a customer's specific requirements.

FEATURES AND OPTIONS

- Enclosure sizes include 10x8x6, 14x12x6 and 14x12x8 inches.
- Rugged UV Resistant Fiberglass Reinforced Polyester (FRP) construction with UL94-5V flame rating.
- Stainless steel continuous door hinge and stainless steel quick release latches with padlock hasps.
- Color Gray
- 120 VAC powered enclosures feature power outlets and optional pre-wired power cord.
- 100-240 VAC power enclosures feature universal power outlets.
- Optional thermostat controlled cooling fans and heating systems.
- Vented models feature rain shields and removable filters.
- (4) stainless steel mounting feet included.
- Optional pole mounting kits available.



ENCLOSURE

Molded from durable and UV resistant fiberglass reinforced polyester (FRP) with a UL94-5V flame rating, the NF series features a stainless steel continuous door hinge and stainless steel latches with provision for padlocks. The door is fully gasketed making this enclosure suitable for use indoors or outdoors. The NF Series enclosures are available in both Gray and Black.

ALUMINUM EQUIPMENT PLATE

The enclosure and plate can be drilled and modified by the installer to suit unique site requirements. In addition, the mounting plate features a number of pre-drilled hole patterns for mounting popular wireless access points without any modifications. These include various models of Cisco® Aironet®, MikroTik, Ubiquiti® Rocket®, mimoso, Aerohive® and more. Models with blank plates are also available.

COOLING FAN VENTILATION

Model with this option feature dual 4" vents and a thermostat controlled cooling fan. The low noise, high airflow fan helps maintain lower internal temperatures. The fan turns on when the internal temperature reaches 100°F (38°C) and turns off when it drops to 79°F (26°C). The fan is wired internally so it does not require the use of the AC outlets leaving them available for internal equipment use. Rain shrouds on the front door keep rain water from entering the enclosure, and the internal aluminum mesh filters are removable for cleaning. Dual fans are also available by request.

VENTILATION

Enclosures with this option feature two 4 inch air vents with cleanable aluminum mesh screens which are covered by rain shields.

MOUNTING

Four removable stainless steel mounting feet are included so that the enclosure can be securely mounted to a wall or structure. An optional pole mounting kits are also available.

CUSTOMIZATION

We offer numerous standard models and options including equipment mounting plates, DIN rails, AC or DC power, air vents, cooling fans and heaters and more. We also offer full customization, engineering and on-site CNC machining of enclosures and associated equipment, all with quick turnaround time.

ORDERING INFORMATION

MODEL#	DESCRIPTION	TOTAL ONBOARD Wh	WEIGHT
SwitchPak Plus	14 X 12 X 8 WP Enclosure, HIPOE/85WH+SW4P, Mounting Hardware	85	18.5lbs
SwitchPak Plus 350	14 X 12 X 8 WP Enclosure, HIPOE/85WH+SW4P, AP-350Wh, Mounting Hardware	435	24lbs
SwitchPak Plus 700	16 X 16 X 8 WP Enclosure, HIPOE/85WH+SW4P, 2ea AP-350Wh, Mounting Hardware	785	29.5lbs



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