# ESOF030-HCU Series

### Outdoor Cabinet (350W/K Thermosiphon HEX)



There are lots of external forces can threaten the outdoor system, not only the temperature but also the humidity. Then the cooling function plays an important role in the power system, and the flexibility is also the common requirement to apply several kinds of electronics. ESOF030-HCU Series is developed for that.

Beside well protected by robust enclosure with IP55 class, the internal configuration can be adjusted easily, such as the numbers of wall layers, the type of thermal systems.

To keep the sensitive modules, batteries functioning in a high level and to reduce the CAPEX and OPEX, ESOF030-HCU Series is the ideal solution for the challenges. Your concern, our mission.

#### **Key Features**

- -48V<sub>DC</sub> output for telecommunication applications
- HEX Cooling
- IP55 protection class for outdoor application
- Perfectly integrated with Delta
   Telecom Power system controller

#### **Applications**

- 3G / 4G / 5G
- Fixed Line
- Datacom



## **ESOF030-HCU Series**



Voltage (range)         Single phase, 1W+N+PE (L1, N, FG); 110 – 120 Vxc           Maximum Current @ nominal Input         Single phase: 12A (Max.)           Frequency         50/60 Hz           DC INPUT           Voltage (default)         -54 Voc           Voltage (adjustable range)         -40 to -60 Vbc           Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class         NEMA4           ENVIRONMENTAL           Operating Temperature         -40°C to +46°C (-40°F to +115°F)           Storage Temperature         -40°C to +75°C (-40°F to +167°F)           Altitude         0 to +3000 m           Related Humidity         95%, non-condensing (Max.)           Acoustic Noise         65 dB(A) (Max.)           Cooling         Thermosiphon HEX (x3)           System Cooling Capacity         350 WK (x3)           Heating Capacity         HEH150PA-A01 (x4) <t< th=""><th>EGAEAE-02-2</th><th>INPUT</th></t<>	EGAEAE-02-2	INPUT
Frequency         50/60 Hz           DC INPUT           Voltage (default)         -54 Vpc           Voltage (adjustable range)         -40 to -60 Vpc           Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class           NEMA4           ENVIRONMENTAL           Operating Temperature           -40°C to +46°C (-40°F to +115°F)           Storage Temperature           -40°C to +75°C (-40°F to +167°F)           Altitude           0 to +3000 m           Related Humidity           95%, non-condensing (Max.)           Acoustic Noise           65 dB(A) (Max.)           Cooling           Thermosiphon HEX (x3)           System Cooling Capacity         350 W/K (x3)           HEH150PA-A01 (x4)           HEH150PA-A01 (x4) <td></td> <td><u> </u></td>		<u> </u>
DC INPUT           Voltage (default)         -54 Voc           Voltage (adjustable range)         -40 to -60 V₀c           Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class         NEMA4           ENVIRONMENTAL         Operating Temperature           -40°C to +46°C (-40°F to +115°F)           Storage Temperature         -40°C to +75°C (-40°F to +167°F)           Altitude         0 to +3000 m           Related Humidity         95%, non-condensing (Max.)           Acoustic Noise         65 dB(A) (Max.)           Cooling         Thermosiphon HEX (x3)           System Cooling Capacity         350 W/K (x3)           Heating         HEH150PA-A01 (x4)           Heating Capacity         1500 W (x4)		
Voltage (default)         -54 V <sub>DC</sub> Voltage (adjustable range)         -40 to -60 V <sub>DC</sub> Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class         NEMA4           ENVIRONMENTAL           Operating Temperature         -40°C to +46°C (-40°F to +115°F)           Storage Temperature         -40°C to +75°C (-40°F to +167°F)           Altitude         0 to +3000 m           Related Humidity         95%, non-condensing (Max.)           Acoustic Noise         65 dB(A) (Max.)           Cooling         Thermosiphon HEX (x3)           System Cooling Capacity         350 W/K (x3)           Heating         HEH150PA-A01 (x4)           Heating Capacity         1500 W (x4)		quency 5
Voltage (adjustable range)         -40 to -60 V <sub>DC</sub> Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class         NEMA4           ENVIRONMENTAL           Operating Temperature         -40°C to +46°C (-40°F to +115°F)           Storage Temperature         -40°C to +75°C (-40°F to +167°F)           Altitude         0 to +3000 m           Related Humidity         95%, non-condensing (Max.)           Acoustic Noise         65 dB(A) (Max.)           Cooling         Thermosiphon HEX (x3)           System Cooling Capacity         350 W/K (x3)           Heating         HEH150PA-A01 (x4)           Heating Capacity         1500 W (x4)		INPUT
Maximum Current @ nominal Input         224 A (Max.)           MECHANICAL           Dimensions (W x H x D)         2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)           Weight         approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)           Protection class         NEMA4           ENVIRONMENTAL <ul></ul>		age (default)
MECHANICAL  Dimensions (W x H x D)  2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)  Weight  approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)  Protection class  NEMA4  ENVIRONMENTAL  Operating Temperature  -40°C to +46°C (-40°F to +115°F)  Storage Temperature  -40°C to +75°C (-40°F to +167°F)  Altitude  0 to +3000 m  Related Humidity  95%, non-condensing (Max.)  Acoustic Noise  65 dB(A) (Max.)  Cooling  Thermosiphon HEX (x3)  System Cooling Capacity  350 W/K (x3)  Heating  HEH150PA-A01 (x4)  Heating Capacity  1500 W (x4)		age (adjustable range)
Dimensions (W x H x D)  2600.8 x 1932.4 x 1337.7 mm (102.0 x 76.0 x 52.7) (add 4 inch plinth)  Weight  approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)  Protection class  NEMA4  ENVIRONMENTAL  Operating Temperature  -40°C to +46°C (-40°F to +115°F)  Storage Temperature  -40°C to +75°C (-40°F to +167°F)  Altitude  0 to +3000 m  Related Humidity  95%, non-condensing (Max.)  Acoustic Noise  65 dB(A) (Max.)  Cooling  Thermosiphon HEX (x3)  System Cooling Capacity  HEH150PA-A01 (x4)  Heating Capacity  1500 W (x4)  STANDARDS		imum Current @ nominal Input    2
Weight approx. 1106.7 kg (2440 lbs) (Batteries, Power System and Load Equipment excluded)  Protection class NEMA4  ENVIRONMENTAL  Operating Temperature -40°C to +46°C (-40°F to +115°F)  Storage Temperature -40°C to +75°C (-40°F to +167°F)  Altitude 0 to +3000 m  Related Humidity 95%, non-condensing (Max.)  Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)  STANDARDS		CHANICAL
Protection class  NEMA4  ENVIRONMENTAL  Operating Temperature  -40°C to +46°C (-40°F to +115°F)  Storage Temperature  -40°C to +75°C (-40°F to +167°F)  Altitude  0 to +3000 m  Related Humidity  95%, non-condensing (Max.)  Acoustic Noise  65 dB(A) (Max.)  Cooling  Thermosiphon HEX (x3)  System Cooling Capacity  350 W/K (x3)  Heating  HEH150PA-A01 (x4)  Heating Capacity  1500 W (x4)  STANDARDS		ensions (W x H x D) 2
ENVIRONMENTAL  Operating Temperature -40°C to +46°C (-40°F to +115°F) Storage Temperature -40°C to +75°C (-40°F to +167°F) Altitude 0 to +3000 m  Related Humidity 95%, non-condensing (Max.) Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4) Heating Capacity 1500 W (x4)  STANDARDS		ght a
Operating Temperature -40°C to +46°C (-40°F to +115°F) Storage Temperature -40°C to +75°C (-40°F to +167°F) Altitude 0 to +3000 m Related Humidity 95%, non-condensing (Max.) Acoustic Noise 65 dB(A) (Max.) Cooling Thermosiphon HEX (x3) System Cooling Capacity 350 W/K (x3) Heating HEH150PA-A01 (x4) Heating Capacity 1500 W (x4)  STANDARDS		ection class N
Storage Temperature -40°C to +75°C (-40°F to +167°F)  Altitude 0 to +3000 m  Related Humidity 95%, non-condensing (Max.)  Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)		VIRONMENTAL
Altitude 0 to +3000 m  Related Humidity 95%, non-condensing (Max.)  Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)		rating Temperature ۔ــ
Related Humidity 95%, non-condensing (Max.)  Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)		age Temperature
Acoustic Noise 65 dB(A) (Max.)  Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)		ude 0
Cooling Thermosiphon HEX (x3)  System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)		ated Humidity 9
System Cooling Capacity 350 W/K (x3)  Heating HEH150PA-A01 (x4)  Heating Capacity 1500 W (x4)  STANDARDS		ustic Noise 6
Heating HEH150PA-A01 (x4) Heating Capacity 1500 W (x4)  STANDARDS		ling T
Heating Capacity 1500 W (x4)  STANDARDS		lem Cooling Capacity 3
STANDARDS		iting H
		ting Capacity 1
Safety cULus LISTED		ANDARDS
		ety c
Environment RoHS		ironment R

All specifications are subject to change without prior notice.



<sup>\*\*</sup> Battery life varies according to operating temperature and charge/discharge cycle use; user shall consult battery vendors/specifications and choose the right battery according to the applications requirements