

ESOA300-HAF Series

Outdoor Cabinet



Descriptions

The Delta outdoor cabinet is the choice from the tropics to the arctics when space is scarce or site density needs to be increase cost-effectively.

The Delta outdoor series offers several size options, ensuring right dimensions for telecom equipment. A flexible configuration is the way to tailor solutions for your demand, and our outdoor cabinets offer and option to build the whole base station inside. Wall options are with multi- or single-layer, and e-lock mechanism completes the protection of installed equipment.

Advanced thermal cooling enables remarkable savings both in capital and operational expenditures.

Main features

Resistant outdoor enclosure made of aluminum IP 55 protection class.

Single (common) equipment compartment FAN cooling system – air ventilation (AV) and air filter modular structure of internal equipment to meet specific customer requirements.

Support Remote Monitoring and Management Solution (RMMS) function.

Delta CellID system built-in; DC or AC, battery backup Multilayer wall design.

Bottom cable entry with flexible configuration of cable glands.

Applications

Network base stations

Wireless applications

Fixed line application, data communications



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Technical specifications

1. Cabinet structure		
1.1	Dimension	Max. H2060 x W800 x D850 mm (overall with plinth; w/o GPRS/WCDMA Antenna)
1.2	Construction	IP55 double layers high strength AL5 series aluminum cabinet
1.3	Materials: - Cabinet outer skin - Cabinet inner skin - Internal frames - Plinth - Gasket - Thermal insulation	2mm aluminum steel with painting galvanized steel (SGLCC) 3mm aluminum Continues Form-in-Place (FIP) gasket 20 mm EPS
1.4	Internal rack dimension - Equipment space - Battery space	19"/21" x 16U 48V battery x 2 strings
1.5	Door locking	Keyless design with remotely door control and local RFID access function
1.6	Lifting Ears	4 hangers under roof cover
1.7	Plinth	Standard (150 mm height) with 24x snap plugs (6x right, 6x left, 12x rear entry)
1.8	Ground bar	Telecom equipment ground bar x 1 Plinth ground bar x 1
1.9	PE earthing stud	M8 2 holes lock, pitch 25.4mm (in plinth rear left side)
1.10	Cable Entry Bottom access Cabinet floor	Left side: 3xPG9, 6xPG13.5, 4xPG36 Right side: 2x PG9, 3x PG13.5, 9x PG21, 2x PG29
1.11	Weight	Approx. 170Kg (W/O rectifier, external, cooling unit)
1.12	Finish	Polyester Powder Paint, RAL7035
1.13	Standard accessories	Adjustable slid equip. supporter x 3 10x alarm connection Krone 2 battery shelves (for 125(W) x330(H) x 560(D) x 4 block / each shelf) Battery cable x 2 sets (2M, 33mm ² with M8 ring terminal) Door sensor Service light 1W / 48V Umbrella holder laptop tray 4 sets x fiber brackets Anti-Static wrist strap.
2.2	Construction	Power system with flat sliding mechanism, 6 rectifier slots
2.3	Weight	Approx. 27Kg (W/O rectifier)
2.4	Operating temperature	-40 to 65°C
2.5	AC I/P - Normal - Range	3P4W+PE, 230/400V _{RMS} , 26.2A _{RMS} / phase 85~300 V _{RMS} , 45~66Hz
2.6	DC O/P - Normal - Range - Max.	54Vdc, 17.4KW (N+1) 42~58Vdc 300A O/P, 250A for load (max.)
2.7	DC PDU-Breaker	NPL1: 6 x 25A NPL2: 6 x 25A PL: 2 x 25A, 6 x 16A 2 x 16A (Fan & internal devices) Battery: 6 x 125A (4 in outdoor level)
2.8	DC SPD	Class C 40KA/75Vdc, one pole (Phoenix)
2.9	LVD	250A LVBD x 1 200A LVLD x 1 (NPL1); 200A LVLD x 1 (NPL2)
2.10	Current measurement	Total battery current Total NPL load current Total PL load current
2.11	Controller	Orion ,display, with menu structure Keypads, status LEDs Support RMMS function Remotely door control Generator control and monitoring
2.12	Measurement function	6* battery middle point (Voltage measure) TA/TE/TB1/TB2 temperature sensor (IC type) Battery stolen alarm function
2.12	Controller interface	WEB interface SNMP protocol RS485 (4-wire, 2-wire), Modbus RTU
2.13	Dry contact (N.O)	Standard x 7: 1 for DG ON/OFF. 5 for system alarm, 1 for door open alarm
2.14	DI	18 (max.) 8 for system device & 10 for site device (customer)
2.15	Rectifier	DPR2900 HE rectifier x 0
3. Thermal system		
3.1	Fan cooling (Air Ventilation)	302 CFM axial fan x 3
3.2	DC I/P -Normal -Range	54Vdc, 75W 36~60Vdc
2. Power system		
2.1	Dimension	H5U x W21" x D334mm with sliding rail and stopper

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3.3	Cooling capacity	$\Delta T \leq 5^{\circ}\text{C}$ @1000W equipment heat dissipation (airflow: front to rear)
3.4	Air Filters - Class - Dimension - Pressure drop (EN779) - Q'ty	F6 (standard), Gore filter (option) EN779 F6 filter: 300x500x46mm Gore filter (option): 305x455x57mm F6 : 12.5 pa @100CFM Gore Filter (optional): 60 pa @85CFM 2 pcs

8. Ordering information

8.1	Outdoor Cabinet	ESOA300-HAF13
8.2	Rectifier	ESR-48/56B F c

Subject to change without notice

4. Environment

4.1	Operating temperature	-10 to 45°C
4.2	Protection class	IP 55 (EN 60529); for cabinet
4.3	Noise (sound pressure @1m)	Max. 65dB(A) for fan cooling
4.4	Humidity	95 % max, non cond.
4.5	Safety	EN, CE, UL, CAN/CSA in Rectifier level CE in system level
4.6	EMC	EN 300 386 Conduction: class A (Rectifier) Radiation: class B (Rectifier)

5. AC I/P PDU

5.1	Dimension	H360 x W180 x D58mm (located at right side wall & next to power shelf)
5.2	AC I/P breaker	1P 50A x 3
5.3	AC Input terminal	3P4W+PE (3 phase), or 1P2W+PE (single phase)
5.4	AC SPD	Standard: class C 40KA, 3+1 (Phoenix) Optional: class B+C 50KA, 3+1 (Phoenix)
5.5	AC service socket	Universal service socket, with 1P 10A breaker

6. Network equipment

6.1	Dual SIM Modem	GPRS/ WCDMA/ WAN (850/900/1800/2100MHz; 850/1900/2100 MHz)
6.2	Antenna	2 (support GPRS/WCDMA)

7. e-lock

7.1	Local access	RFID; Configuration management via RMMS
7.2	Remote access	Delta RMMS
7.3	Emergency backup port	For backup power connection

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