

## Outdoor power cabinet

The Type 3 cabinet platform is designed for a variety of applications and can be tailored to fit your specific needs. The cabinet is well suited for power, batteries and telecom/industrial equipment, all integrated into a robust package. This solution has a unique cube design that give flexibility to easily have various heights of cabinets.



# TYPE 3

## OUTDOOR CABINET

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### RELIABILITY

Reliability within the outdoor plant depends upon a cool, dry and secure environment for the electronics such as the DC power, Telecom and Industrial equipment. The Type 3 Outdoor Power Cabinet more than accomplishes this with a variety of Thermal Management solutions that will keep sensitive electronics functioning in the most extreme environments.



### APPLICATIONS

The Type 3 cabinet is well suited for a wide range of Telecom and Industrial applications such as:

- Radio Access Networks (2G, 3G, 4G / LTE / WiMax)
- Optical Networks
- Cable TV
- DSL
- SCADA
- Rail and Metro
- Power distribution

The cabinet works very well as a stand-alone power / battery backup solution and provides additional space for telecom / Industrial equipment. In addition the outdoor enclosure is suited for Industrial environments.

### KEY FEATURES

- 19" EQUIPMENT SPACE
- OPTIONAL THERMAL INSULATION
- DC POWER, TELECOM/INDUSTRIAL EQUIPMENT AND BATTERY BACKUP
- GALVANIZED STEEL CONSTRUCTION (ALUMINUM UPON REQUEST)
- DOOR MOUNTED THERMAL MANAGEMENT OPTIONS:
  - FAN AND FILTER
  - AIR CONDITIONER
  - HEAT EXCHANGER
  - HYBRID
  - HEATERS
- CABINET VARIANTS:
  - SINGLE BAY
  - DUAL BAY
  - DUAL CHAMBER
- CLOGGED FILTER DETECTION
- ANTI VANDAL KIT
- UL 50
- IP55, NEMA 3R
- EASY INSTALLATION
- EASY FILTER CHANGE

# TYPE 3

## CABINET VARIANTS

### SINGLE BAY CABINET

Eltek's Single bay cabinet works very well as a stand-alone power / battery backup solution. Can be as well used as expansion cabinet for telecom / industrial equipment or battery backup expansion cabinet.

Single bay cabinet is economical solution in applications where single climate zone in cabinet is required.

### THERMAL MANAGEMENT SPECIFICATION

|                  |   |
|------------------|---|
| Various options  | - Fan and filter<br>- Air-conditioner<br>- Heat exchanger<br>- Hybrid |
| Heater(s)        | Depend on selected thermal management                                 |
| Cooling capacity | Depend on selected thermal management                                 |

### CONSTRUCTION

|            |   |
|------------|---|
| Rack space | From 21U to 44U<br>(depend on selected model) |
| Insulation | Optional                                      |

Specifications are subject to change without notice

### SINGLE BAY CABINET



### DUAL CHAMBER CABINET

Eltek's Dual Chamber Cabinet splits the cabinet into two climate zones. Top zone cools the electrical equipment with a fan and filter, while the bottom zone cools the batteries with a small air-conditioner.

With its unique feature of cooling the batteries only with an air-conditioner, you will save capital cost as well as operating cost

### TOP CHAMBER SPECIFICATION

|                    |                 |
|--------------------|-----------------|
| Thermal management | Fan and filter  |
| Fan voltage        | 48Vdc           |
| Fan speed control  | Temp. regulated |
| Cooling capacity   | 700W            |
| 19" space          | 10U             |

### BOTTOM CHAMBER SPECIFICATIONS

|                    |                 |
|--------------------|-----------------|
| Thermal management | Air-conditioner |
| Insulation         | Dual layer      |

Specifications are subject to change without notice

### DUAL CHAMBER CABINET



# TYPE 3

## CABINET VARIANTS

### DUAL BAY CABINET

With a dual bay cabinet you are able to combine power, batteries, telecom equipment and even an Indoor BTS in one cabinet stand. This unique solution gives you the best flexibility and provides easy use of indoor BTS's used in an Outdoor Cabinet.

The right bay can also be equipped with high capacity batteries for hybrid sites for cyclic gen sets or solar/wind powered sites.

### THERMAL MANAGEMENT SPECIFICATIONS

|  |                 |
|--|-----------------|
| Thermal management                     | Fan and filter  |
| Fan Voltage                            | 48Vdc           |
| Fan speed control                      | Temp. regulated |
| Heater                                 | Optional        |
| Thermally separated left and right bay |                 |

### OPTIONS

|                                   |                       |
|-----------------------------------|-----------------------|
| Anti-vandal security feature      |                       |
| Top cable entry for RF cables     |                       |
| Battery shelf space in Right Bay: | 700mm x 516mm x 180mm |
| (W x D x H)                       | (27,5" x 20,3" x 7")  |

### DIMENSIONAL SPECIFICATIONS

|                |                |
|----------------|----------------|
| Cabinet height | 2200mm (86,6") |
| Cabinet depth  | 901mm (35,5")  |
| Cabinet width  | 1462mm (57,6") |

Specifications are subject to change without notice

### DUAL BAY CABINET



# TYPE 3

## THERMAL MANAGEMENT OPTIONS

### HEAT EXCHANGER



### HEAT EXCHANGER

Eltek's Heat Exchanger provides a closed loop heat management system that protects the equipment from corrosive and highly polluted environments and has a low operating cost. Site maintenance is brought to a minimum level as filter change is not required.

#### TECHNICAL SPECIFICATIONS

|                     |                       |
|---------------------|-----------------------|
| Cooling capacity    | 100W/k                |
| Heat Exchanger core | Epoxy coated aluminum |
| Fans specification  | 48Vdc / 100W / IP44   |
| Fan speed control   | Temp. regulated       |

#### PHYSICAL SPECIFICATIONS

|  |  |
|--|--|
| Dimensions (H x D x W)   | 1092mm x 201,5mm x 401,5mm<br>(43,0" x 7,9" x 15,8") |
| Weight   | 34,3kg (76,18 lbs)                                   |
| Adds 202mm (7,95") to depth of the cabinet                                   |  |
| Adds 56.7~70.1kg (125~154lbs) to weight of cabinet depends on model selected |  |

#### CONSTRUCTION SPECIFICATIONS

|  |
|--|
| Galvanized steel (non-corrosive) skin material             |
| UL rated gasket for outdoor use                            |
| Outdoor Polyester powder coating Light grey RAL 7035       |
| Mesh screens out unwanted objects such as bugs and leaves. |

Specifications are subject to change without notice

### FAN AND FILTER

Eltek's free cooling cabinets have the advantage that a large amount of air can be exchanged, giving very high cooling performance with low power consumption. The cabinets are designed with overpressure which provides higher sealing performance.

#### TECHNICAL SPECIFICATIONS

|                          |  |   |
|--------------------------|--|---|
| Cooling capacity         | 2000W  |   |
| Fan(s)                   | Single or dual fans (optional)   |   |
| Fans specification       | 48Vdc / 100W / IP44  |   |
| Fan speed control        | Temp. regulated  |   |
| Easy change Inlet filter | Optional M5 (EN 779) filters:<br>- Progressive dump filter, 0,35m <sup>2</sup><br>- Pleated filter, 4,2 m <sup>2</sup> – 5,8 m <sup>2</sup><br>- Gore pleated filter, 4,2 m <sup>2</sup> |   |
|                          | Easy change Outlet filter  | M5 (EN 779) filter:<br>Progressive dump filter, 0,22 m <sup>2</sup> |

#### PHYSICAL SPECIFICATIONS

Integrated in the door and adds 53mm (2") to depth of the cabinet

#### CONSTRUCTION SPECIFICATIONS

|                  |   |
|------------------|---|
| Material         | Galvanized steel  |
| Splash guard     | Aluminium made with large openings to ensure low speed airflow            |
| Heater(s)        | Optional one or two heaters   |
| Filter detection | Optional: sends an alarm when filter gets clogged or if filter is removed |

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### FAN AND FILTER



# TYPE 3

## OUTDOOR CABINET

| Model   | 1,2m   | 1,5m                             | 1,8m                      | 2,0m                                  | 2,2m            |
|---|--|----------------------------------|---------------------------|---------------------------------------|-----------------|
| <b>PHYSICAL SPECIFICATIONS</b>                            |  |                                  |                           |                                       |                 |
| Exterior Width (mm)                                       | 700 (27,5")  | 700 (27,5")                      | 700 (27,5")               | 700 (27,5")                           | 700 (27,5")     |
| Exterior Depth (mm)*                                      | 770 (30,3")  | 770 (30,3")                      | 770 (30,3")               | 770 (30,3")                           | 770 (30,3")     |
| Weight*   | 68,6Kg (151 lbs)   | 94kg (207 lbs)                   | 100kg (220 lbs)           | 102,5kg (226 lbs)                     | 105Kg (231 lbs) |
| Rack space  | 21U  | 28U                              | 34U                       | 39U                                   | 44U             |
| *Info does not contain cooling options                    |  |                                  |                           |                                       |                 |
| <b>THERMAL MANAGEMENT OPTIONS</b>                         |  |                                  |                           |                                       |                 |
| Fan and Filter  | See page 4 for details   |                                  |                           |                                       |                 |
| Heat Exchanger  | See page 4 for details   |                                  |                           |                                       |                 |
| Air Conditioning unit                                     | AC-ACU, 0.57kW   | AC-ACU, 2kW                      | DC-ACU, 0.52kW            | DC-AC, 2kW                            |                 |
| - Power input   | 230V <sub>AC</sub> ±10%, 50/60Hz   | 230V <sub>AC</sub> ±10%, 50/60Hz | 48V <sub>DC</sub> nominal | 48V <sub>DC</sub> nominal             |                 |
| - Cooling capacity (at 35C/35C)                           | 570W at 50Hz   | 2000W                            | 520W                      | 2000W                                 |                 |
| - Heating capacity (built-in)                             | 500W   | 1000W                            | 500W                      | 600W                                  |                 |
| - Adds to cabinet depth                                   | 253mm (10")  | 163mm (6.4")                     | 223mm (8.8")              | 213mm (8.4")                          |                 |
| - Adds to cabinet weight                                  | 34.1kg (75lbs)   | 57.1kg (126lbs)                  | 40.1kg (88lbs)            | 60.1kg (132lb)                        |                 |
| All units are IP55 rated for outdoor use                  |  |                                  |                           |                                       |                 |
| Hybrid Cooling Unit<br>(see contact for more information) | Active cooling/Free cooling solution (AC/FC)<br>Active cooling/Heat Exchanger (AC/HEX) |                                  |                           |                                       |                 |
| Dual chamber solution                                     | See page 2 for details   |                                  |                           |                                       |                 |
| <b>CONSTRUCTION SPECIFICATIONS</b>                        |  |                                  |                           |                                       |                 |
| Skin Material   | 1.5mm (0.06") thick electro-galvanized steel (corrosion-resistant)                     |                                  |                           |                                       |                 |
| Frame Material  | Galvanized Steel   |                                  |                           |                                       |                 |
| Powder-Coat Paint   | Outdoor Polyester Light gray RAL 7035 coating  |                                  |                           |                                       |                 |
| Insulation  | Closed Cell Insulation   |                                  |                           |                                       |                 |
| <b>DOOR SPECIFICATIONS</b>                                |  |                                  |                           |                                       |                 |
| Latches   | Four-point latched, available with an optional lock                                    |                                  |                           |                                       |                 |
| Gasket  | UL rated for outdoor use   |                                  |                           |                                       |                 |
| Door Stop / Door Stay                                     | Wind latch to hold door during maintenance (120°)                                      |                                  |                           |                                       |                 |
| <b>RAIL SPECIFICATIONS</b>                                |  |                                  |                           |                                       |                 |
| Construction  | Galvanized Steel   |                                  |                           |                                       |                 |
| Mounting Pattern  | EIA Standard with holes for cage nuts  |                                  |                           | Optional M5 or M6 kits available      |                 |
| Mounting  | 19" mount - Available kits from 5U   |                                  |                           | 23" versions available upon request   |                 |
| <b>MISCELLANEOUS SPECIFICATIONS AND OPTIONS</b>           |  |                                  |                           |                                       |                 |
| Cable Entry   | Bottom Cable Access through a 2x FL21 cut outs   |                                  |                           | Various glands available upon request |                 |
| Battery trays   | Optional 23" tray(s) capable of holding a string of batteries up to 260kg (572 lbs)    |                                  |                           | Each tray weighs 5.6kg (12.3lbs)      |                 |
| Ground Bar  | 11 position M6 pressnut  |                                  |                           |                                       |                 |
| Heater  | Optional 500W, can install up to 2 heaters   |                                  |                           | Each kit weighs 1.3Kg (2.86lbs)       |                 |
| Plinth  | Foot Print (W x D) 698mm x 743mm (27,5" x 29")   |                                  |                           |                                       |                 |
| Lifting Ears  | 4 lifting ears located under top cover   |                                  |                           |                                       |                 |
| Zone 4<br>(see contact for more information)              | Special Cabinets available to handle Zone 4 Seismic activity                           |                                  |                           |                                       |                 |
| Shipping Pallet   | Shipments made in an upright position on a wood pallet                                 |                                  |                           | Weight of packing 14kg (30lbs)        |                 |
| <b>DESIGN STANDARDS</b>                                   |  |                                  |                           |                                       |                 |
| Electrical  | IEC 60950, UL 60950*, CAN CSA-C22.2 No. 60950-1-03 (Depending on Equipment Installed)  |                                  |                           |                                       |                 |
| EMC   | ETSI EN 300 386 V.1.3.1, EN 61000-6-3, EN 61000-6-2                                    |                                  |                           |                                       |                 |
| Environment   | ETS 300 019, Ingress Protection: EN 60529 IP55   |                                  |                           |                                       |                 |

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