COMMSCOPE®

FIST-CAB3

Street cabinet for broadband applications

2016 ORDERING GUIDE | 1ST EDITION

Contents

Active Street Cabinet (FIST-CAB3)

1. PRODUCT DESCRIPTION

The FIST-CAB3 Active Street Cabinet is a 3 compartments, double–wall, dust proof, outdoor cabinet which provides environmental and mechanical protection for passive optical functions and for active transmission equipment, including the necessary thermal management and power systems.

Typical applications are:

- Digital loop carrier
- Fiber to the curb
- Remote switching
- Broadband access

The passive optical functions include the fiber management of fiber splices, patching & passive component integration (e.g. optical splitters, WDM, etc).

This street cabinet can accommodate the standard FIST shelves and allows for a variety of flexible configurations:

- Fiber to fiber splicing (distribution point)
- Fiber terminations to pigtails with interconnect or cross-connect patching facility

Optionally a complete power system platform can be provided, designed to fit the street cabinet. This power system platform provides the global architecture that addresses the expected power requirements of the system and can include:

- Power distribution
- Batteries
- Rectifiers
- Controllers

2. CHARACTERISTICS AND MAIN FEATURES

The **cabinet housing** offers the following features:

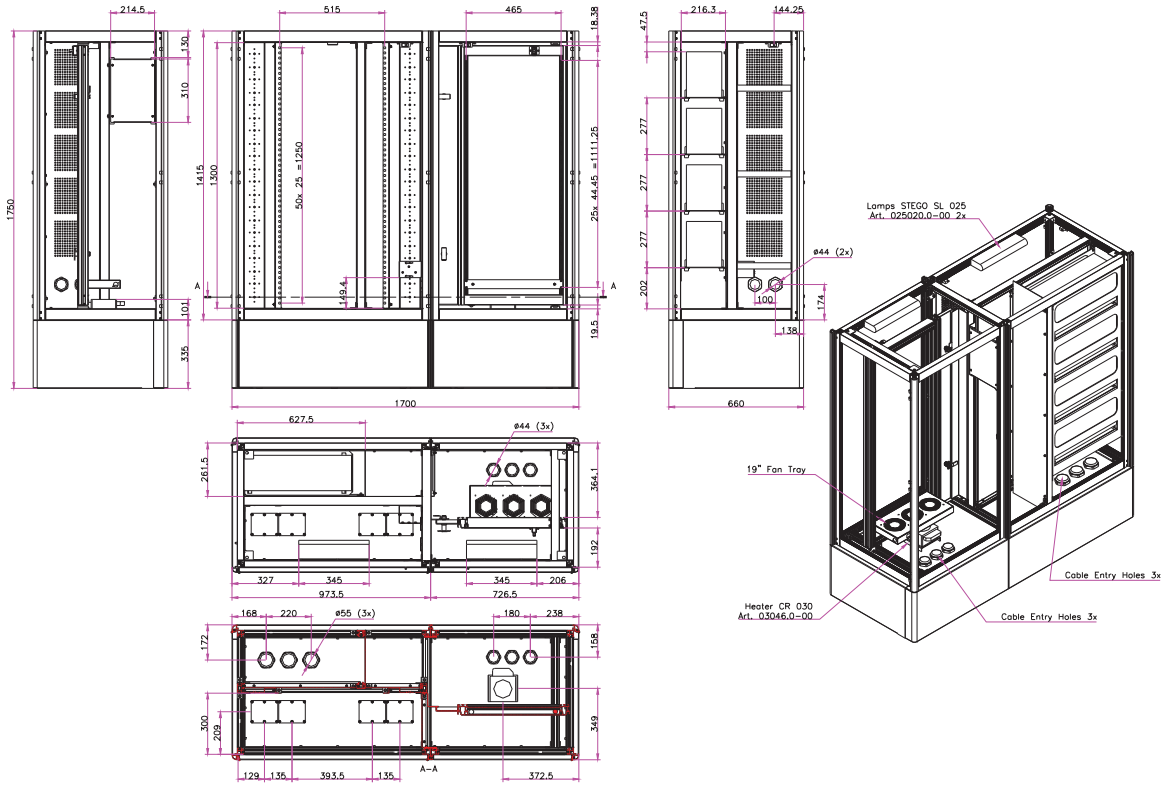
- Mechanical stable, double wall, aluminum construction (all-weather proof and corrosion resistant).
- Thermal natural ventilation between walls and roof, allowing good heat dissipation, blocking sun irradiation and preventing condensation inside the cabinet.
- Good protection against vandalism.
- High EMC shielding effectiveness.
- Easily removable outer panels without externally accessible screws.

Property	Part	Characteristic(s)
Dimensions	Cabinet (W x H x D) Base (W x H x D)	1700 x 1415 x 660 mm 1700 x 335 x 660 mm
Material	Metal parts	Aluminum or stainless steel
Installation/ transportation		Eyebolts on roof
Miscellaneous	Doors	Doors with alarm switch and doorstopper at 130° angle.
Protection against sun irradiation	Roof	Isolation foam built inside the roof to reduce the influence of sun irradiation.
Protection rating (dust/water)		IP 55
Standard		Conform with ETSI 300 019-1-4

3.

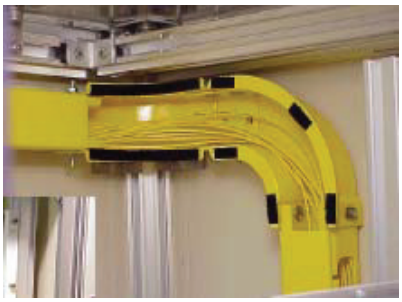
3.1 COMPARTMENTS DESCRIPTION

The cabinet has **3 compartments**, each secured with a separate door and lock.
It is supplied with a base of 300 mm height that is mounted onto a concrete pedestal.
For cable accessibility, each compartment has a removable front cover, which can only be removed when the swing doors are opened.



The **fiber-optic compartment** can accommodate 7 FIST splicing or patching shelves, includes left and right drum plates for pigtail management and is provided with 4 cable inlet plates in the bottom. This compartment is closed with a double swing door and secured with a lock and key. The bottom plate contains the necessary cable termination and sealing facilities.

Pigtail ducting with bend controls to guide the pigtails from the fiber compartment to the active equipment is provided as well.



The **batteries compartment** is located beyond the fiber-optic compartment and contains 4 shelves (2 batteries each) for easy access.

The **power and active equipment compartment** contains a 19" swing frame with 25 height units and a total weight load capacity of 200 kg, integrated with 1 unit 19" fan tray for internal air circulation.
A heat exchanger is mounted on the door in front of the 19" frame and has a cooling capacity of 65 Watt/K with 48 V/DC which allows to cool min. 1500 Watt according to ETSI 300 019:

Temperature range outside cabinet:– 45 / + 45 °C
Temperature range inside cabinet:– 5 / + 65 °C

A heater with thermostat is mounted on the bottom of this compartment (conform to ETSI 300 019 Class 4.1E).
A lamp is build into the roof.
This compartment is closed with a single swing door and secured with a lock and key.

3.2 THERMAL MANAGEMENT

The FIST-CAB3 Active Street Cabinet can be offered with different types of temperature control and monitoring systems such as:

Heat exchanger
IP 55 protection rate
Cooling capacity ranging from 25 to 90 Watt/K in 48 V/DC and 115/230 V/AC
Separated airflow (opposite airflow)
Inside temperature: 7 – 25 °C above outside temp.

Compressor Cooling
Required if the temperature inside the cabinet has to be lower than the outside temperature.

Membrane filter technology
Filter type as IP 55 protection rate
New cooling effectiveness with inside temperature max. 3°C above outside temperature.
Only one maintenance call per year
Low noise level

Active cooling roof:
Fan cooling system inside roof
Completely separated airflow by using airflow between walls of doors and roof.
Very cost effective system for medium and low power loss inside cabinet.

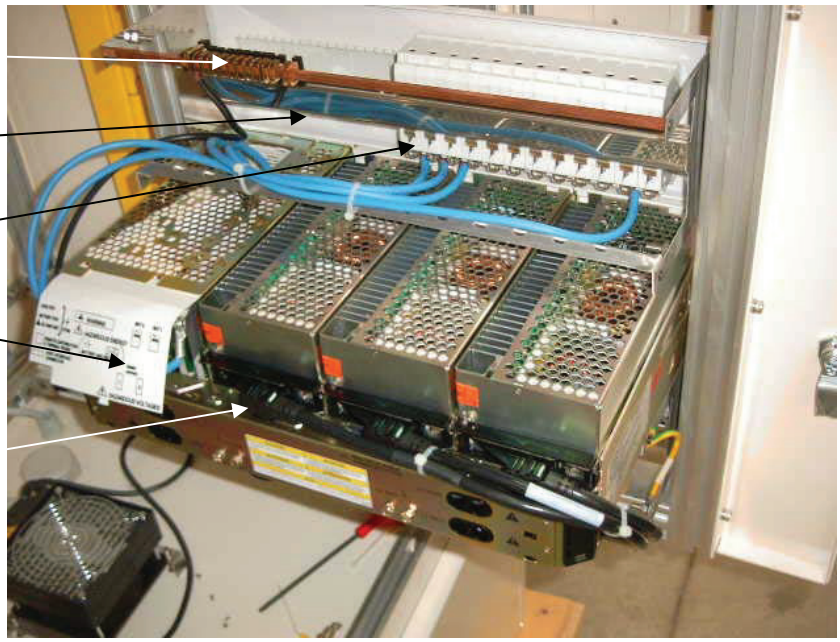
3.3 POWER SYSTEM

Optionally a complete power system for 650 W up to 1950 W 48 VDC can be offered.
The system can include:

- AC distribution (incl. surge arrestors) for 1 or 3 phase input 110/230V
- Rectifiers (YUKON Power Systems) and LVD controller
- Batteries:
  either 2 battery strings 48V up to 100Ah for max. 8 hours back-up 1280W
  or 4 battery strings 60Ah for max 8 hours backup 1400W
- DC distribution with DIN style breaker or customized

FRONT VIEW

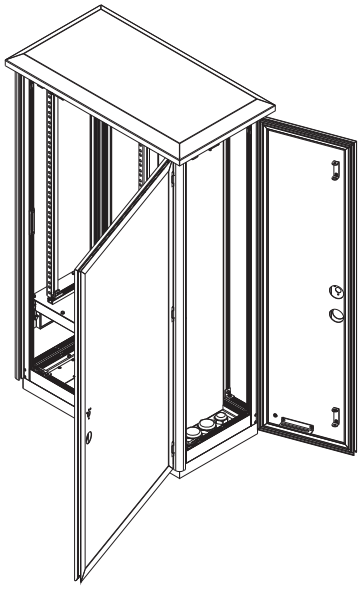
REAR VIEW

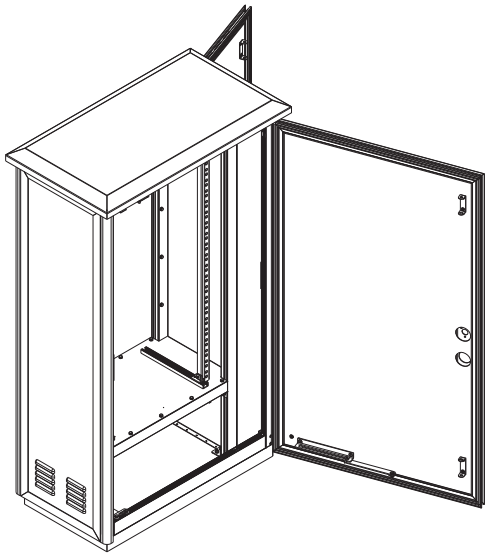


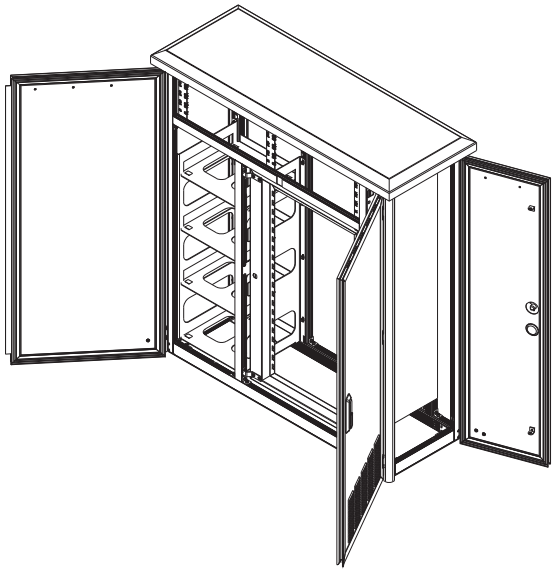
Battery compartment and 4 shelves with drawer function

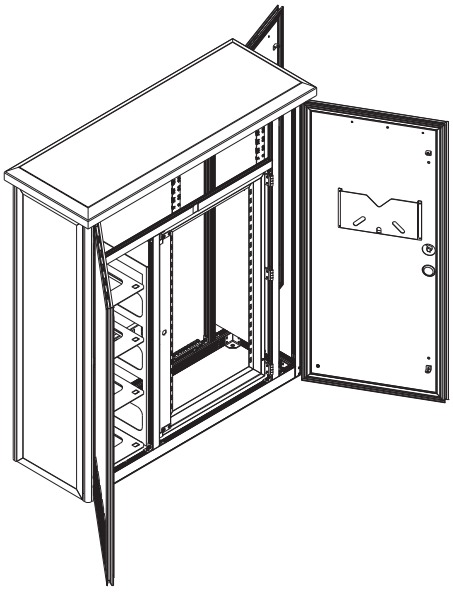
3.4 ALTERNATIVE ACTIVE STREET CABINETS

To accommodate for different applications and sizes, other active street cabinets can be designed on request. Below you get a few examples of alternative sizes.









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