



RUFIS

PnP Aggregation Box

The RUFIS (Remote Radio Head Units Field Installation System) delivers the most advanced cabling and aggregation infrastructure for cellular communications towers and facilities to connect power and fiber from the equipment room/cabin to the Remote Radio Heads.

The RUFIS Aggregation Box enables the use of two riser cables (1 multifiber and 1 copper) to connect up to 6 RRH and reduces the Total Cost of Ownership (TCO) by:

- a Aggregation of cables and single-handed operation of PnP connectors (save on installation time and reduce the skills required during installation and maintenance)
- b Easy site upgrades (e.g. from 3 to 6 RRHs) without pulling new riser cables
- c Superior RUFIS Lightning Surge Protection Device embedded in the unit significantly increases the overall site reliability.

Multiple product versions and customizations are available to exactly match user requirements (e.g. number and types of inputs/ outputs, use of hybrid cable, different levels of Surge Protection, etc.)

Features

- Dimensions-external (excluding connectors): 300 x 400 x 180 mm
- Material (EN 10130): Polycarbonate with EPDM gasket or mild steel
- Weight (fiber and power aggregation box): 9 kg (steel version) - 6 kg (polycarbonate version)
- Ingress protection (EN 60529): IP 55
- Operating range : -40° C to +65°C
- Impact resistance (EN 62262): IK 08UV (Polycarbonate version)
- UV resistance: UL 508 (Polycarbonate version)
- Flammability Rating (UL 746 C 5): UL 94 5V (Polycarbonate version)
- Wind Load: 0.23 KN (at 55 m/s)

Fiber optics connectivity

Inputs

1 x FULLAXS bulkhead receptacle equipped with an outdoor rated MPO connector for up to 12 single mode or multi mode fibers

Outputs (based on 4 output version)

3 x 2 LC ODVA bulkhead receptacles
1 x FULLAXS bulkhead receptacle equipped with an outdoor rated MPO connector for 6 single mode or multi mode fibers - available for future site upgrades

Optical characteristics (input-output)

Optical loss: SM-typical 0.45 dB
MM-typical 0.6 dB

Power connectivity

(based on 4 output version)

Inputs

1 x TE HTS Series B surface mounted housing (dual copper cable size 10 to 25 mm², max current Rating: 63 A)

Outputs

3 x TE CPC series 3 - Shell size 17 bulkhead receptacles (dual copper cable range 2 to 6 mm², max. current rating 25 A)

1 x TE HTS Series B surface mounted housing (dual copper cable range 10 to 25 mm², max. current Rating: 63 A) – to be used for future sites upgrades

Embedded fuseless Surge Protection Device component

Electrical characteristics

Nominal Operating Voltage 48 volt DC
Maximum Discharge Current: 5 kA 10/350 µsec, 60kA 8/20 µsec
Maximum Operating Voltage: 75 volt DC
Nominal Voltage Protection Level: 400 volt
Compliant to: IEEE C62.41, IEC 61643-12, EN 61643-11

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Fiber Optics

Fiber part

- 1** Include a fiber part
- 0** No fiber part
(rest of FO codes are meaningless)

Input connector

- F** FULLAXS-MPO externally sealed connector
- L** Cable gland and internal LC connectors
- G** Cable gland and internal MPO connector

Number of outputs

4 or 6

Output connectors

- O** ODVA-LC externally sealed connector
- L** Cable gland and internal LC connectors

Fiber type

- S** Single mode
- 6** 62.5/125 (OM1)
- 5** 50/125 (OM2)

Power

Power part

- 1** Include a power part
- 0** No power part
(rest of PO codes are meaningless)

Input connector

- G** Cable gland for 16-25 mm² and internal termination block
- L** HTS series B externally sealed connector

Number of outputs

4 or 6 (in case of both fiber and power box, must be the same as fiber outputs)

Output connectors

- O** CPC series 3 externally sealed connector
- L** Cable gland and internal terminal blocks

Lightning and overvoltage protection

- 1** Fitted
- 0** Not fitted

Switches or breakers on outputs

- S** Switches installed
- B** 30 A rated circuit breakers installed
- 0** No switches/breakers

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