

Integrated Solutions

Low Profile Solution



INTRODUCTION

The Low Profile Solution (LPS) is a visually appealing, small-form-factor tower and equipment shelter that can be rolled out rapidly to provide increased wireless capacity between the traditional larger base stations.

This new solution comprises a pre-cast concrete plinth, a mono-pole with antenna heights ranging from 9m – 28m high, and a modular cabinet housing the power and RF equipment. Network back-haul connectivity is provided via fibre optic or microwave links.

SOLUTION COMPONENTS:

The solution includes the following:

- 9-28m Pole (*For billboards, the pole can be less than 1m)
- Fibreglass Radome
- Plinth with Battery Vault / High Security Battery Box
- 23U Outdoor Modular Cabinet / High Security Cabinet
- Cooling Solution
- AC PDU
- DC Power Solution
- RF Solution
- Optional items: Street Light, MW Bracket, Fence, 1.5kW Aircon, site share solution

POLE SPECIFICATIONS

The Pole can be monopole, slip joint type or concrete with a Ø500mm (RET only) or a Ø600mm (with mechanical tilt) Fibreglass Radome.

The following variants are available:

- 9/12m: Ø 273 x 4.5mm – CAT1
- 15m: Ø 273 x 4.5mm – CAT1
- 18m: Ø 273 x 10mm – CAT2
- 24m: Concrete Pole – CAT1
- 28m: Concrete Pole – CAT1

NOTE: All variants are designed for 1.5m² wind area with 40m/s wind, an antenna mass of 100kg and can support a street light and 2 x Ø 0.3m or 1 x Ø 0.6m microwave dish.

PLINTH SPECIFICATIONS

The plinth comprises of two parts that are sealed in-between. The bottom part has a cast in bolt cage for the pole and the top part has the battery vault and mounts for the cabinet. The parts can be assembled into one unit or used separately for applications where the pole and cabinet are not adjacent.

- Plinth Size (Assembled): 2000mm(W)x2100mm(D)x720mm(H)
- Sealant: Grey Water-block
- Mass: 8000kg
- Strength: 100kPa Ground Pressure minimum

CABINET SPECIFICATIONS (Standard)

23u Double Cabinet Dimensions	1700mm(w) x 850mm(d) x 1300mm(h)
Space available after T-IS Equipment installation	39U
Double Cabinet Mass (empty)	300kg
Door Sealing Material	Printed Polyurethane - Continuous
IP rating	55
Surface finish	Polyester Powder Coat (Low-Solar-Absorption and Anti-graffiti finish available)
Cabinet Base Material	1.2 - 2mm SS (Available in 304, 3CR12 or 430)
Locking mechanisms and fixings Material	304 stainless steel
Negative Pressure Free-Air Cooling	48VDC Centrifugal
Passive Cooling Flow Rate	1250 m ³ /h
Passive Cooling Capacity at 10°C (ΔT)	4.2 kW

NOTE: The LPS site can also be supplied with our High Security Cabinets. Have a look at our High Security Cabinet brochure for more information.

A traditional Greenfield telecoms base station site with 45-54m high lattice towers requires significant civil construction work and can take up to six months to plan, install and commission. The LPS can be deployed in three days to a week – barring serious complications.

Tellumat Integrated Solutions offers full turnkey design and manufacturing of the low-profile site kit together with build and installation, as well as a maintenance and support services. With our significant radio frequency equipment manufacturing, implementation and testing experience – we are the partner you can trust for all your site requirements!



Have a project to discuss talk to us today

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