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Cel-Fi Repeater Tower, AL340 Deployable Tripod

Model Number

ENG-PT-00038

Platform Tripod Tower

Height System AL340, 11 metres

Solar System 350 W, 100 Ah LiFePO4, 12 Vdc

Repeater Technology Cel-Fi G31, Telstra or Optus



The Deployable Cel-Fi Repeater Tower is a unique quick-deployed mobile coverage solution for blackspot areas This system is designed to meet the need for a low cost and quick mobile coverage solution for temporary and semipermanent mining, agriculture, roadworks, and construction operations.

This system is designed to provide a wide beam of outdoor 4G mobile coverage to a distance of up to 400 metres, capable of operating even in a locations with very weak coverage. It can be used as a relay, with other repeaters aiming back to this 'master' site potentially beyond 1 kilometre.

Able to be set up in about an hour or two with a team of two, this tripod tower allows instant mobile voice and data coverage anywhere within range of a base station - no footing required. The bolt-together design means easy shipment to site, and the included winch allows raising and lowering of the tower eliminating the need for tower climbs.

Operation is simple and effective; the lattice tower modules are assembled, locked into position using M12 zinc bolts, and then raised using a powerful 1.2 tonne winch system. The winch-up design eliminates the need for an elevated work platform or a certified tower rescue team to perform maintenance work.

- Choose from Telstra or Optus 4G
- 10 metre hinging aluminium tower
- Solar power system suitable for most areas
- Remote management available through Powertec National Operations Centre
- Pre-built, quick setup time.

System Technical Data

ELECTRICAL SYSTEM

| System Voltage | 12 Vdc | Battery Type | Lithium LiFePO4 |
|-----------------|----------------------|-------------------------|-----------------------------|
| Batteries | 1 | Battery Capacity, Total | 100 Ah |
| Solar Panels | 2 | Nominal Power, Total | 350 W |
| Controller | Victron MPPT | Monitorable | Victron Cerbo GX |
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| REPEATER SYSTEM | | | |
| REPEATER SYSTEM | Cel-Fi G31 | Frequency | Band 28 700 MHz |
| | Cel-Fi G31 20 MHz | Frequency MIMO | Band 28 700 MHz 1x1 SISO |

PHYSICAL CHARACTERISTICS

| Tower Series | AL340 | Face Width | 340 mm |
|--------------|--|------------|--|
| Material | 6005 T5 Aluminium Alloy, 50 x 50 mm, 2.5 mm wall SHS, AS 1163- C350L0 | Finish | Raw Aluminium, Hot dipped galvanised, Duragal to AS 4792 |
| Dimensions | 9940 mm ø (4470 mm outrigger length) | Weight | 380 kg |

| QTY | COMPONENTS |
|-----|--|
| 1 | 1.0 m galvanised tripod base |
| 3 | Galvanised outrigger triangular sections (labelled A, B, C) |
| 3 | 1400 mm galvanised outrigger extension sections (labelled A, B, C) |
| 3 | 1500 kg rated levelling jacks |
| 1 | AL340 aluminium lattice base module (labelled 1) |
| 2 | AL340 aluminium lattice modules (labelled 2, 3) |

| 1 | |
|---|--|
| | Electrical and equipment cabinet |
| 1 | Gin Pole Assembly |
| 1 | Pulley Block |
| 1 | Guy wire kit, pre-assembled |
| 1 | 1.2 tonne rated winch assembly |
| 1 | Grid Parabolic or Yagi Donor Antenna + Cable |
| 1 | Sector Service Antenna + Cable |
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