

# AL220 ALUMINIUM ROOF LATTICE TOWER SPECIFICATIONS

AP-RLT-AL220-18 ROOF TOWER, 18.6 METRES

#### OVERVIEW

With the exploding demand for wireless point to multipoint services, WISP's have been under increasing pressure to maximise site and spectrum utilisation. Often the challenge faced is reaching the largest number of clients with a limited vantage point from the fibre POP - traditionally tall 'telomasts' have been used but are unsuitable for multiple sectors and most certainly unsuitable for high gain dishes. APAC met the challenge with an ultra-lightweight, climbable, aluminium lattice tower that could be easily raised on a roof with a small team.

These roof lattice towers consist of a large universal-joint base plate, modular 3.1 metre lattice sections, guy wires, and your choice of headframe. The sections are easily stacked meaning roof towers can be built as small as 3.1 metres with full structural engineering certification up to 37.2 metres (21.7 metres in Wind Region C). APAC's AL220 aluminium lattice modules feature three upright columns made from 40x3 round tube with 25x3 round tube lattice braces welded in between by certified boom welders, providing incredible strength while retaining a lightweight design that can support your technician to climb the full height.



Your safety is most important - the tower base comprises of a 50 tonne rated, fully machined billet aluminium universal-joint. This universal-joint design allows axis locking to permit safe and easy raising, as well as the components machined from solid structural grade aluminium providing absolute peace of mind of tower integrity.

#### FEATURES

- Lightweight, easy to raise
- Fully engineered design
- Climbable to full 18.6 metres
- Machined billet universal-joint base
- 6 mm 7x19 galvanised steel guy wires
- 3100 mm section lengths
- Low maintenance aluminium construction

## ENGINEERING

- Aluminium fabrication in accordance to AS1664
- Aluminium welding in accordance to AS1665
- 7/16" Zinc or Stainless Steel bolts in accordance to ISO 3506 U.N.O.
- Guy cables in accordance to AS3569, Class 7x19 Grade 2070
- Guy wire preload tension to 0.94 kN
- Cable joins and attachments in accordance to AS2579
- Structure classification per AS3995 is Type II



## SPECIFICATION

PARAMETER	AP-RLT-AL220-18
Extended Height	18.9 m
Typical Footprint	21800 mm ⌀ (at ideal 60º guying)
Tower Weight	78 kg (excl. guy wires)
Supported Sail Area	>1.27 m <sup>2</sup> (Region A), >0.71 m <sup>2</sup> (Region C)
Guy Pre-tension Force	0.94 kN (Regions A to C)
Lattice Sections	6
Module Section Length	3100 mm
Module Width	220 mm
Module Face Width	180 mm
Lattice Material	6005 T5 Aluminium Alloy, 40x3 mm CHS legs, 25x3 mm braces
Lattice Finish	Raw, acid finish
Guy Kit	350 m spool, 36 thimbles, 18 turnbuckles, 36 wire saddles
Guy Wires	6 mm, Class 7x19, Grade 2070, Galvanised Steel
Universal Joint Construction	Machined Billet, 6005 T5 Aluminium Alloy
Universal Joint Finish	Raw Aluminium

