



# Communication Hut Specifications

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## MTGA Communication Huts

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MTGA can custom design a shelter solution to meet your unique requirements.

### **Tailored to client need**

Such is the depth of our design and engineering experience we are able to offer our clients an extensive range of construction and fit out alternatives tailored to client need. Our huts are designed and manufactured at MTGA's facility in Carlisle (suburb of Perth), in Western Australia.

### **General design criteria**

All MTGA communication huts are designed to operate on a 24-hour continuous use basis in harsh Australian environmental conditions.

### **Specific design criteria**

Our remote Pilbara mine site huts, for example, have been designed to be able to withstand 316.8 kph wind speeds. Solar panel systems and antennas/masts are all designed to both rapidly deploy and stow away in order to meet these criteria.

### **Electrical design**

Hut electrical design complies with AS 4871.6:2013 "Electrical equipment for mines and quarries" or other standard to meet your individual requirements. All external cables are enclosed in a UV rated conduit and all enclosures are designed for bottom cable access to reduce the possibility of moisture ingress.

### **Optional: Lightning Surge Protection**

Additional lightning protection for mast ethernet cables and DC cables up mast.

These consist of Novaris Surge protection for ethernet cables and Transient Controls Australia (TCA) for DC power.

### **Solar Power system**

We are normally required to supply a solar power system including folding panel array and storage batteries to supply a continuous rated output for the equipment used within the hut, typically one (1) 360W high-efficiency SunPower solar panel. Other solar panels may be used as per client requirement. The solar panels are typically fixed at 35 degrees for optimum sun exposure for year-round use.

### **Electrical safety**

One lockable power isolation point is installed for the battery and one lockable isolation point is installed for the solar arrangement.

Batteries are mounted and clamped in a frame to ensure adequate spacing and ventilation between the battery units.

Battery compartment vents are fitted to the battery box in accordance with AS standards.

### **Transport**

Our clients often require us to provide them with huts that are rapidly deployable and able to be moved. Our huts are liftable by a crane by using inbuilt rated lifting points.



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<b>Mass:</b>	4 tonnes (approximately)
<b>Construction Type:</b>	Modular Communication Hut for Pilbara operating conditions
<b>Power Output (cont.):</b>	58W
<b>Battery redundancy:</b>	4 days
<b>Battery recharge time:</b>	3 days
<b>Max. wind speed:</b>	316.8kph
<b>Solar Panels:</b>	1 x 360 - 400 watt
<b>Batteries:</b>	5 x 120Ah Deep Cycle AGM
<b>Battery configuration:</b>	12V / 24V
<b>Enclosures:</b>	Mild Steel powder coated support frame 100mm thick insulated panels - Smooth skinned polyester coated steel, laminated to a core of fire retardant treated SL Grade (CFC free) polystyrene insulation
<b>Base:</b>	Concrete filled, hot dipped galvanized steel frame

