

Test Agreement

Test Description: **Ethernet (Wireless) Alternative Connectivity Trial**



Test Agreement

Test Description: **nbn**[™] Ethernet (Wireless) Alternative Connectivity Trial

Version	Description	Effective Date
1.0	Issued on 3 February 2021	TBA
1.1	Extension to 31 January 2022	31 July 2021

Copyright

This document is subject to copyright and must not be used except as permitted below or under the *Copyright Act 1968* (Cth). You must not reproduce or publish this document in whole or in part for commercial gain without the prior written consent of **nbn**. You may reproduce and publish this document in whole or in part for educational or non-commercial purposes as approved by **nbn** in writing.

Copyright © 2021 **nbn** Limited. All rights reserved. Not for general distribution.

Disclaimer

This document is provided for information purposes only. The recipient must not use this document other than with the consent of **nbn** and must make their own inquiries as to the currency, accuracy and completeness of this document and the information contained in it. The contents of this document should not be relied upon as representing **nbn**'s final position on the subject matter of this document, except where stated otherwise. Any requirements of **nbn** or views expressed by **nbn** in this document may change as a consequence of **nbn** finalising formal technical specifications, **nbn**'s ongoing internal reviews, or legislative and regulatory developments.

Environment

nbn asks that you consider the environment before printing this document.

Contents

1. Interpretation and definitions	4
1.1 Interpretation	4
1.2 Definitions	5
2. Pre-conditions for participation	6
3. Documentation	6
4. Supply of the Test Product and the Test Activity	6
5. Service Levels	7
6. Test Participant's Obligations	7
6.1 General Obligations	7
6.2 Test Contact	8
6.3 Reports	8
6.4 Test Results	8
7. Charges	8
8. Term, termination and withdrawal	9
8.1 Term and termination	9
8.2 Cancellation by nbn	9
8.3 Cancellations by Test Participant	9
8.4 Obligations regarding termination of supply	10
9. Indemnity	10
10. Liability exclusion	10
11. Test Participant Acknowledgements	10
Appendix A Test Products	13
1. Test Products	13
2. Test Product based on nbn™ Ethernet (Wireless)	13
Appendix B Solar Mount Solution Requirements	15

Test Agreement

Test Description: **nbn**[™] Ethernet (Wireless) Alternative Connectivity Trial

Parties

- nbn co limited (ABN 86 136 533 741) of Level 13, 100 Mount Street, North Sydney NSW 2060 (**nbn**);
- <company name> (ABN XX XXX XXX XXX) of <address> (**Test Participant**).

Background

- A significant proportion of Australia's land mass is identified as being rural and remote where traditional fixed broadband connectivity is limited in its availability. To service users operating in these locations, technologies such as wireless and satellite are used to provide connectivity.
- Businesses operating in these areas include mining, agriculture, etc typically operating at sites with a large defined footprint.
- Emerging technologies such as autonomous machinery and remote sensing equipment to support these industries are being designed to operate in these types of locations and using a range of wireless technologies provide data back to command sites anywhere in the world.
- To support these emerging solutions communications technologies are required to operate by way of local area networks that support connectivity to End Users devices which may be operating at a considerable distance from the **nbn** device and existing power supplies.
- nbn** has been approached to develop and make available to its customers a solar powered service in the nature of the Test Product to be used to evaluate the effectiveness of **nbn**[™] Ethernet (Wireless) connectivity when used in conjunction with End User Equipment to support farmers, mining companies and other businesses operating within a defined property.
- This document constitutes a Test Description for the purposes of the Standard Test Terms.
- The purpose of the Test is to enable **nbn** and Test Participant to test:
 - the capability of **nbn** and Test Participant to deliver the Test Product;
 - the performance and functionality of the Test Product; and
 - the capability of **nbn** and Test Participant to order, provision, support, and operate the Test Product.

1. Interpretation and definitions

1.1 Interpretation

For the purposes of this Test Description:

- any capitalised term used but not defined in this Test Description has the meaning given to that term in the Standard Test Terms unless expressly specified otherwise; and

- (b) any capitalised term used but not defined in this Test Description or the Standard Test Terms has the meaning given to that term in the standard form of access agreement version of the WBA published on the **nbn** website from time to time.

1.2 Definitions

In this Test Description:

Agreement means this Test Description and the Standard Test Terms.

nbn Indemnified Parties means **nbn**, each of **nbn**'s Related Bodies Corporate, each of the Personnel of **nbn** and **nbn**'s Related Bodies Corporate, each of **nbn**'s subcontractors and each of the Personnel of each of **nbn**'s subcontractors.

Solar Mount Solution means the equipment to be supplied and maintained by the Test Participant in accordance with the requirements set out in Appendix B.

Standard Test Terms means the agreement entitled "Test Agreement – Standard Test Terms" entered between **nbn** and Test Participant.

Test Activity has the meaning given in clause 4(b).

Test Contact means each person appointed by each of **nbn** and Test Participant as:

- (a) their single central contact point regarding the Test; and
- (b) any additional people appointed as contact points in relation to specific matters regarding the Test (such as operational or technical issues).

Test Connection means a fixed line or wi-fi based connection, and the associated local area network supplied by the Test Participant that connects the NTD to the Test End User Equipment.

Test End User Contract means a contract between Test Participant and End User which:

- a) permits **nbn** to supply a Test Product to the Test Location and conduct all related inspection, installation, maintenance and deinstallation works;
- b) obliges End User to provide or procure all reporting, feedback and any other assistance that **nbn** or Test Participant may reasonably require in connection with this Test;
- c) includes any necessary consents from End User to permit End User's confidential information and its Personnels' Personal Information to be disclosed to and used and disclosed by **nbn** and its Personnel for the purposes of this Test; and
- d) obliges the End User to obtain any and all necessary consents, authorisations, licences and permits that may be required lawfully to enable it to use the Solar Mount Solution, Test Connection and Test End User Equipment for use in carrying out the Test Activity, and supply any mains power that End User may need to procure in order to carry out the Test Activity.

Test End User Equipment means each item that is used by an End User in connection with the **nbn**TM Network, the Test Activity or the Test Products and supplied by the End User or Test Participant, including routers, mobile devices and personal computers.

Test Location has the meaning set out in clause 4(a).

Test Participant has the meaning given to that term in the "Parties" provision of this Agreement.

Test Product means a **nbn**[™] Ethernet (Wireless) Test Product as described in Appendix A (which excludes, for clarity, the Solar Mount Solution, Test Connection and Test End User Equipment).

Test Term means the term of the Test as determined in accordance with clause 8.1.

2. Pre-conditions for participation

To participate in this Test, Test Participant must by the date notified by **nbn**:

- (a) have responded to the EOI Request and been selected by **nbn** to participate in this Test;
- (b) have entered into the Standard Test Terms and this Test Description;
- (c) have completed the relevant on-boarding and certification activities required by **nbn** for this Test;
- (d) have in place (and maintain at all times during the Test Term) a Test End User Contract in respect of each End User; and
- (e) be a party to a WBA and, at all such times, be fully compliant with the terms of that WBA.

3. Documentation

- (a) **nbn** may, without limiting clause 8, immediately amend or replace this Test Description by giving notice to Test Participant.
- (b) If **nbn** provides notice under clause 3(a), the parties will use reasonable endeavours to work with each other for the purpose of avoiding any inconvenience to either party.

4. Supply of the Test Product and the Test Activity

- (a) Subject to clauses 4(b) to 4(e), **nbn** will supply a Test Product to Test Participant in respect of a location if:
 - (i) **nbn** has notified Test Participant that the Test Product is available in respect of a specified location; and
 - (ii) Test Participant requests the supply of the Test Product to the location and confirms to **nbn** that Test Participant will supply a Downstream Product at that location, ("**Test Location**").
- (b) To facilitate the Test:
 - (i) subject to clause **Error! Reference source not found.**, **nbn** will supply, install and assure an NTD outdoor component, a connecting cable and an NTD indoor component, to which **nbn** will supply a Test Product; and
 - (ii) the Test Participant must supply, install, maintain and assure the Solar Mount Solution (including the connection between the Solar Mount Solution and the NTD), the Test Connection, the Test End User Equipment, in accordance with **nbn**'s direction. Further details pertaining to the connection between the Solar Mount Solution and the NTD, and the Test Connection, will be set out in the Test Plan.

(together, the **Test Activity**).

- (c) The Test Participant must ensure that the Test End User Equipment is situated within the Test Location at all times.
- (d) Test Participant acknowledges and agrees that:
 - (i) the supply of each Test Product is subject to the availability of any relevant inputs in connection with that Test Product, including but not limited to:
 - (A) capacity on the **nbn**TM Ethernet (Wireless) Network as relevant;
 - (B) any equipment, systems and infrastructure; and
 - (C) the ability of the Test Participant to supply and have available a suitable Solar Mount Solution for use with the Test Product as a part of the trial, at its own cost and risk.at the time the Test Participant places an order and at all relevant times during the Test Term, as determined by **nbn** in its discretion; and
- (e) **nbn** may attend the Test Location to review whether the Solar Mount Solution, and NTD have been installed and supplied in accordance with the requirements set out by **nbn**.

5. Service Levels

- (a) No service levels, rebate or compensation of any kind, however described, is available or applicable in connection with this Test or the supply of any Test Product.
- (b) Test Participant acknowledges and agrees that the Test Product may not provide features, functionality, performance, capacity or reliability that are equivalent to a standard Carriage Service (including an internet access or broadband access service).
- (c) **nbn** may interrupt a Product supplied to Test Location to which **nbn** is also supplying or proposing to supply a Test Product and any such interruption will not constitute an Outage or a Service Fault.

6. Test Participant's Obligations

6.1 General Obligations

- (a) Test Participant must support and assist **nbn** with the conduct of this Test, including by doing any of the following where required by **nbn**:
 - (i) undertaking Test related activities (including manual processes) in timeframes determined by **nbn** (acting reasonably) and notified to Test Participant;
 - (ii) providing dedicated resources to work with **nbn** to resolve issues that may arise during this Test;
 - (iii) working collaboratively with **nbn** to refine this Test;
 - (iv) notifying **nbn** of any matter which Test Participant considers to be a material error, defect or deficiency in the products, processes or procedures the subject of this Test, as soon as reasonably practicable after becoming aware of that material error, defect or deficiency;

- (v) without limiting clause 6.1(a)(iv), providing feedback, for the purposes of improving the products, processes or procedures the subject of this Test;
 - (vi) participating in periodic meetings with **nbn** to review test findings; and
 - (vii) performing any other activities as required by a Test Plan.
- (b) Test Participant acknowledges and agrees that **nbn** may:
- (i) notify potential End Users that Test Participant may supply Downstream Products to the potential End Users; and
 - (ii) provide Test Participant's contact details to potential End Users.

6.2 Test Contact

- (a) Whenever requested by **nbn**, Test Participant must make its Test Contacts available to meet with **nbn's** Test Contacts (either in person or by videoconference) to discuss any matters relating to this Test.
- (b) **nbn** and Test Participant will provide telephone and email contact details of their Test Contacts to each other prior to the start of this Test and maintain and provide updates to these contact details for the duration of the Test Term.

6.3 Reports

- (a) Test Participant must provide **nbn** with feedback and reporting in the form, and at the times, defined in the Test Plan.
- (b) Test Participant must, where reasonably requested by **nbn** by giving 5 Business Days' notice:
 - (i) meet with **nbn** to review and evaluate the performance of any Test Products; and
 - (ii) use reasonable endeavours to assist **nbn** to obtain information regarding the performance of a Test Product, any infrastructure that is used to supply the Test Product, and **nbn's** relevant processes and procedures.

6.4 Test Results

- (a) Test Participant consents to **nbn** monitoring and recording, for the purposes of this Test, the usage of Test Products and Downstream Products.
- (b) Test Participant must provide information and feedback to **nbn** regarding the Test Products by:
 - (i) providing information directly to **nbn** as requested by **nbn**; and
 - (ii) immediately notifying **nbn** if Test Participant becomes aware of any actual or likely unexpected or unintended impact of this Test, including in respect of any person not actively participating in this Test.

7. Charges

- (a) No charges will apply to this Test or the Supply of the Test Products.
- (b) **nbn** will reimburse Test Participant for the cost of implementing the Solar Mount Solution up to a maximum of \$7,500, provided the Test Participant has complied the requirements set out in the Test Agreement and this document.
- (c) Each party to this Agreement will bear its own costs of participating in this Test.

8. Term, termination and withdrawal

8.1 Term and termination

- (a) The supply of each Test Product under this Test Description:
 - (i) will start on the date specified in the applicable Test Plan or as otherwise agreed between **nbn** and Test Participant; and
 - (ii) will end on the earlier of:
 - (A) the date notified in a Cancellation Notice in respect of a Test relating to that Test Product issued in accordance with clause 4 of the Standard Test Terms; and
 - (B) the expiry or termination of this Test Description.
- (b) This Test Description will expire on 31 January 2022 unless:
 - (i) terminated earlier in accordance with this Agreement; or
 - (ii) extended by **nbn** by giving notice in writing to Test Participant prior to expiry, in which case this Test Description will expire on that extended date.

8.2 Cancellation by **nbn**

Without limiting **nbn**'s rights under the Standard Test Terms, if Test Participant breaches any provision of this Agreement during the Test Term (including failing to comply with any condition in clause 2), **nbn** may immediately:

- (a) cancel Test Participant's participation in any Test or any part of any Test under this Test Description;
- (b) cease supplying one or more of the Test Products to Test Participant;
- (c) terminate this Test Description; and
- (d) terminate this Agreement.

8.3 Cancellations by Test Participant

- (a) Subject to clauses 8.3(b) and 8.3(c), Test Participant may cancel the supply of a Test Product in respect of Test Location by giving **nbn** at least 10 Business Days' written notice.
- (b) If Test Participant cancels the supply of a Test Product under clause 8.3(a), Test Participant will inform **nbn** of the reason for the cancellation.
- (c) If Test Participant considers that the supply of a Test Product is resulting in an adverse impact on Test Participant's network or services:
 - (i) Test Participant will immediately notify **nbn**;
 - (ii) **nbn** will take reasonable steps to investigate and attempt to resolve the issue; and
 - (iii) Test Participant will provide **nbn** with all reasonably requested assistance in its investigation and resolution activities.

8.4 Obligations regarding termination of supply

If either party cancels or terminates the supply of a Test Product, this Test Description or this Agreement, the parties will use their reasonable endeavours to work with each other for the purpose of avoiding any inconvenience.

9. Indemnity

In addition to the indemnities provided by Test Participant to the **nbn** Indemnified Parties in the Standard Test Terms, Test Participant must pay to any **nbn** Indemnified Party on demand an amount equal to all Losses suffered or incurred by that **nbn** Indemnified Party arising from or in connection with any Claim (including but not limited to any Claim brought by any third party) arising from or in connection with Test Participant's participation in the Test and its performance of the Test Activity, to the extent that such Losses are caused by Test Participant's negligent act or omission, breach of this Agreement, breach of the WBA or wilful misconduct.

10. Liability exclusion

- (a) Notwithstanding anything in the Standard Test Terms, to the full extent permitted by law, Test Participant:
- (i) must not make a Claim against **nbn** for any Loss suffered or incurred by Test Participant in relation to this Test, the Test Products or this Agreement;
 - (ii) releases and forever discharges **nbn** from all Claims and Liabilities which Test Participant has (or at any time might have or may have had) in relation to this Test, the Test Products or this Agreement; and
 - (iii) indemnifies and holds each of the **nbn** Indemnified Parties harmless in respect of any Loss suffered or incurred as a result, or in connection with the supply of the Test Products, and any Test End User Equipment or **nbn**TM Equipment, other than in respect of **nbn**'s confidentiality obligations under this Agreement.
- (b) To the extent that clause 10(a) does not operate to exclude or limit a party's liability or to indemnify a party against Loss, clauses 10 to 11 of the Standard Test Terms will apply.

11. Test Participant Acknowledgements

Test Participant warrants and agrees that:

- (a) Test Participant has made and has relied on its own investigations, enquiries, knowledge and expertise in respect of all Tests, the Test Products, the Test Activity and this Agreement and its own evaluation of any material provided by **nbn** to Test Participant or its Personnel including before the date of this Agreement;
- (b) As part of its investigations and enquiries in respect of all Tests, the Test Products, the Test Activity and this Agreement, Test Participant or its representatives have had access to all documents and information they have requested from **nbn** or its Personnel;
- (c) Test Participant has knowledge and experience in relation to the provision of services similar to the Downstream Products and has had the benefit of independent legal, financial and technical advice relating to its proposed participation in this Test and its entry into this Agreement;
- (d) **nbn** has not made, and no Personnel of **nbn** have made, any warranty as to the performance of any Test Product provided to Test Participant or its Personnel before the date of this Agreement;

- (e) Test Participant is not entering into this Agreement in reliance on, and it may not rely on, any statement of opinion, statement of intention or any other warranty, representation or other statement made or purporting to be made by or on behalf of **nbn** or its or their Personnel, other than as expressly set out in this Agreement; and
- (f) Test Participant has obtained any and all necessary consents, authorisations, licences permits that may be required lawfully to enable it to supply and install the Solar Mount Solution and/or perform the Test Activity, and / or supply any mains power that may be required in order to carry out the Test Activity.

Execution

Executed as an agreement

Signed for **nbn co limited** by its authorised representatives:

Signature of authorised representative

Signature of authorised representative

Name of authorised representative

Name of authorised representative

Date of signature

Date of signature

Signed for <**Test Participant**> by its authorised representatives:

Signature of authorised representative

Signature of authorised representative

Name of authorised representative

Name of authorised representative

Date of signature

Date of signature

Appendix A Test Products

1. Test Products

The Test Product supplied to a Test Location will be supplied by means of the **nbn**TM Ethernet (Wireless) Product as described in, subject to, and in accordance with, section 2 of this Appendix A.

2. Test Product based on nbnTM Ethernet (Wireless)

The Test Product is intended to provide internet connectivity utilising data transmitted over radio signals to connect a Premises to the **nbn**TM broadband access network.

2.1 Test Product Components and Features

The **nbn**TM Ethernet (Wireless) Test Product comprises of the following Test Product Components which Test Participant must acquire and configurable Test Product Features as follows:

Test Product Component	Test Product Features (configurable)
AVC	<ul style="list-style-type: none">• TC-4 PIR:<ul style="list-style-type: none">○ 12/1 Mbps○ 25/5 Mbps; or○ Wireless Plus• TC-1 CIR:• 0/0 Mbps• 0.15/0.15 Mbps; or• 0.3/0.3 Mbps
CVC	<ul style="list-style-type: none">• TC-1 symmetrical CIR:<ul style="list-style-type: none">○ 0-10 Mbps in increments of 5Mbps○ 10-20 Mbps in increments of 10Mbps○ 20-30 Mbps in increments of 5Mbps○ 30-60 Mbps in increments of 10Mbps○ 60-120 Mbps in increments of 20Mbps○ 120-150 Mbps in increments of 30Mbps○ 150-300 Mbps in increments of 50Mbps; or○ 300-500Mbps in increments of 100Mbps• TC-4 symmetrical CIR:<ul style="list-style-type: none">○ 100-300Mbps in increments of 50Mbps; or○ 300-10,000Mbps in increments of 100Mbps

NNI	<ul style="list-style-type: none"> • 1000BaseLX • 10GBaseLR • 100GBaseLR4 • 1000BaseEX • 10GBaseER; or • 100GBaseER4
-----	--

2.2 Test User Network Interface (UNI)

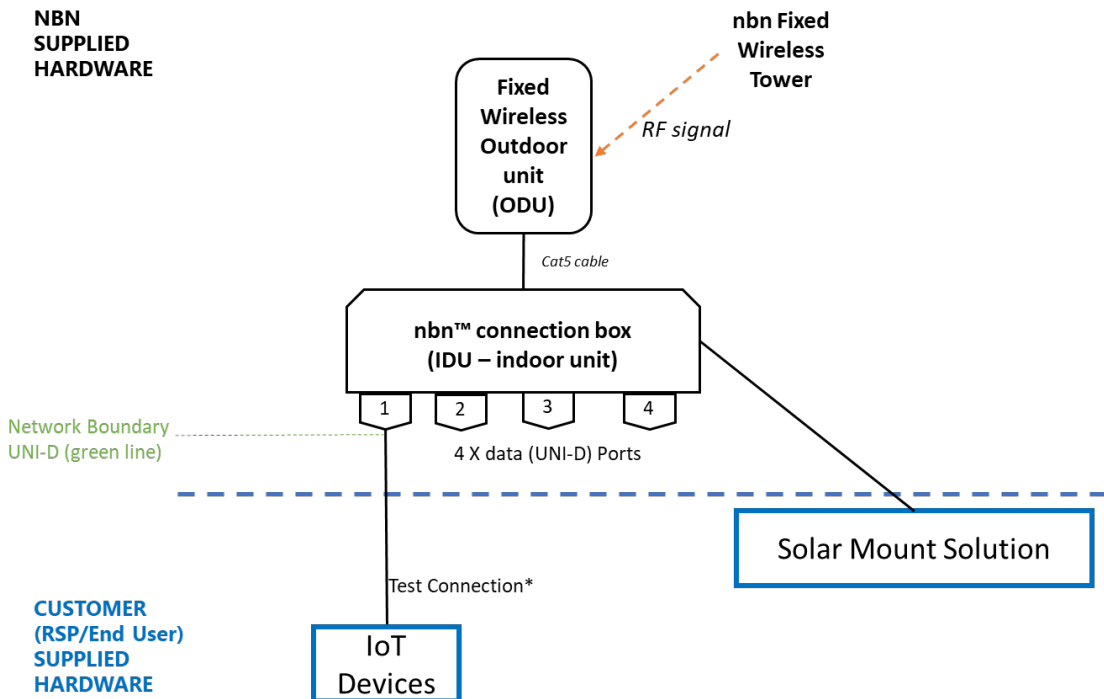
The Test **UNI** is a UNI-D which:

- supplies a Test Product in respect of a Test Location through data carriage; and
- is a physical Ethernet UNI port on the NTD.

Further details of UNI particulars are set out at section 4 of the nbn™ Ethernet Product Technical Specification, which applies to the Test Product.

2.3 Network boundaries

The diagram below illustrates, at a high level, the FW Plus Test Product:



**Test Participant is responsible for providing the Test Connection. For example, this may be achieved (at the Test Participant's option, subject to the terms of this Agreement) through the use of a local area network established served by fixed line connection between the Test End User Equipment and the NTD, or via wifi access.*

Appendix B Solar Mount Solution Requirements

A. An outdoor enclosure to house **nbn** IDU. Solar power system battery and inverter can also be accommodated should loading be acceptable and incorporated into design 230 VAC inverter for the IDU power pack required to meet the current installation requirements.

B. Pole for mounting of Outdoor Enclosure, offset bracket and nbn ODU and Solar Panel.

Note: depending on the Solar Mount Solution structure design, the offset pole requirement would be determined by the ODU pole mount capability on to a mounting pole with a maximum diameter of 60mm.

C. Concrete base supporting Solar Mount Solution Installation. If power system requires multiple batteries, then base can also be utilised for this.

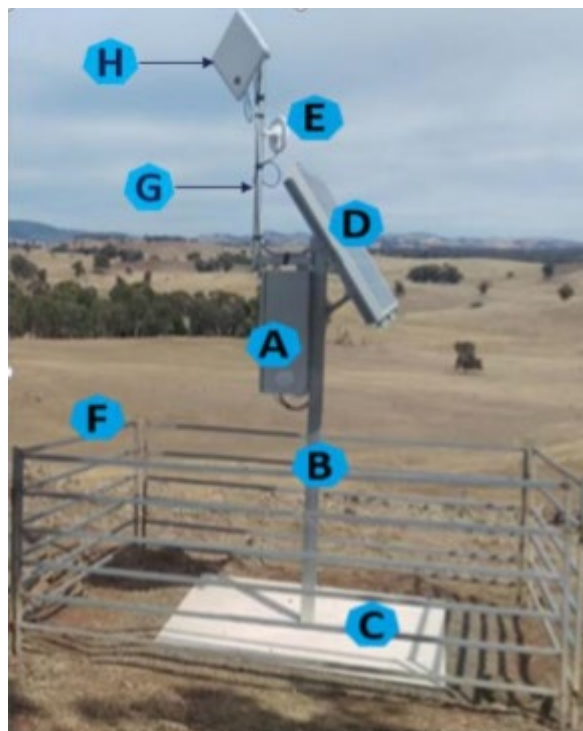
D. Solar Panel as per solar power system design .

E. Wi-Fi link connected to bridge the link from the **nbn** IDU data port at the Solar Mount Solution structure to end user dwelling.

F. Protective fencing or bollards around the structure if required. Protection from stock, vehicles etc .

G. If required, an offset bracket for mounting **nbn** ODU. Wi-Fi antenna can also utilise offset bracket if desired

H. Bracket to mount **nbn** ODU, designed for a pole diameter 42-60 mm



Compliance:

- AS3015 - Electrical installations — Extra-low voltage d.c. power supplies
- AS4509 - Stand-alone power systems

- AS60950 and AS62368 for safety of IT equipment within the cabinet
- AS5033 - Installation of photovoltaic (PV) arrays
- Design wind loading in accordance with AS/NZS 1170.2