

Test Report issued under the responsibility of:



Accreditation No. 3148



## TEST REPORT

### AS/NZS 62368.1 Appendix ZZ Audio/Video, information technology equipment – Safety – Part 1: General requirements

Report Number .....: C59355942

Date of issue .....: 19/01/2023

Total number of pages .....: 12

Applicant's name .....: 2N TELEKOMUNIKACE a.s.

Address .....: Modranska 621, Praha 4, 143 01 Czech Republic

#### Test specification:

Standard .....: AS/NZS 62368.1:2022 Appendix ZZ

Test procedure .....: LAB-06, T110

Non-standard test method.....: N/A

Test Report Form No .....: AS/NZS 62368.1 2022 App ZZ

Test Report Form(s) Originator .....: Comtest Laboratories Pty Ltd

#### General disclaimer:




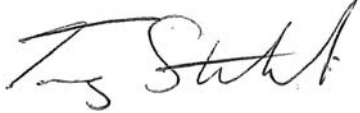
The test results presented in this report relate only to the object tested.

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Test item description .....	Lift Communication System	
Trade Mark .....		
Manufacturer .....	2N TELEKOMUNIKACE a.s.	
Model/Type reference .....	LiftIP 2.0	
Ratings .....	10 – 30 V d.c. or PoE 802.3af	
<b>Testing assessment location:</b>		
<input checked="" type="checkbox"/> Testing Laboratory:	Comtest Laboratories Pty Ltd	
Testing location/ address .....	Unit 1/570 City Road South Melbourne VIC 3205 Australia	
Tested by (name + signature).....	Azriel Leers	
Checked by (name + signature) .....	Neville Lynch	
Approved by (name + signature).....	Tony Stefanovski	

**Summary of testing:**

The LiftIP 2.0 was assessed by TESTCOM Praha to EN IEC 62368-1:2020+A11:2020 in test report number 8551-PT-B0061-22.  
 This report is supplementary to test report number 8551-PT-B0061-22 and only addresses the Australian/New Zealand National Variations.  
 Tests were performed within the following environmental conditions.  
 Temperature: 22 ± 3°C  
 Humidity: 10% – 75% RH  
 Pressure: 950 hPa – 1050 hPa

**Decision rule:**

Where the measurand and the measurement uncertainty falls within the non-compliance limits, the result is FAIL or DOES NOT COMPLY.  
 Where the measurand falls within the non-compliance limits but the measurement uncertainty falls within the compliance limits, the result is FAIL or DOES NOT COMPLY and the measurement uncertainty is reported.  
 Where the measurand falls within the compliance limits but the measurement uncertainty falls within the non-compliance limits, the result is PASS or COMPLIES and the measurement uncertainty is reported.  
 Where the measurand and the measurement uncertainty falls within the compliance limits, the result is PASS or COMPLIES.  
 Measurement Uncertainty is reported at a confidence level of 95% and a coverage factor of k = 2.

**Tests performed (name of test and test clause):**

<u>Clause</u>	<u>Tests</u>
Appendix ZZ	Australia/New Zealand variations

**Testing location:**

Comtest Laboratories Pty Ltd  
 Unit 1/570 City Road  
 South Melbourne  
 VIC 3205  
 Australia

**Summary of compliance with National Variations:**

The product **fulfils** the requirements of Appendix ZZ of AS/NZS 62368.1:2022.

**Possible test case verdicts:**  
 - test case does not apply to the test object ..... : N/A  
 - test object does meet the requirement ..... : P (Pass)  
 - test object does not meet the requirement ..... : F (Fail)

**Testing** ..... :  
**Date of receipt of test item** ..... : 19/01/2023  
**Date (s) of performance of tests** ..... : 18/01/2023

**General remarks:**  
 The test results presented in this report relate only to the object tested.  
 This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.  
 "(See Enclosure #)" refers to additional information appended to the report.  
 "(See appended table)" refers to a table appended to the report.

**Throughout this report a  comma /  point is used as the decimal separator.**

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided ..... :	<input type="checkbox"/> <b>Yes</b> <input checked="" type="checkbox"/> <b>Not applicable</b>
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**When differences exist; they shall be identified in the General product information section.**

**Name and address of factory (ies)** ..... : N/A

**Abbreviations used in the report:**

- normal conditions	<b>N.C.</b>	- single fault conditions	<b>S.F.C</b>
- functional insulation	<b>OP</b>	- basic insulation	<b>BI</b>
- double insulation	<b>DI</b>	- supplementary insulation	<b>SI</b>
- between parts of opposite polarity	<b>BOP</b>	- reinforced insulation	<b>RI</b>

**Indicate used abbreviations (if any)**

<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
<b>Appendix ZZ</b>	Variations to IEC 62368-1:2018 (ED. 3.0) for Australia and New Zealand		<b>P</b>
<b>ZZ1 Scope</b>	This Appendix lists the normative variations to IEC 62368-1:2018 (ED. 3.0)		<b>P</b>
<b>ZZ2 Variations</b>	The following modifications are required for Australian/New Zealand conditions:		<b>P</b>
<b>CI 2</b>	<ol style="list-style-type: none"> <li>1 After the first paragraph, <i>add</i> the following: The Australian or Australian/New Zealand Standards listed below are modified adoptions of, or not equivalent to, the IEC normative references and are required for the application of this Standard. All references in the source text to those IEC normative references shall be replaced by references to the corresponding Australian or Australian/New Zealand Standards. Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably.</li> <li>2 <i>Delete</i> "IEC 60065, <i>Audio, video and similar electronic apparatus - Safety requirements</i>" and <i>replace</i> with the following: AS/NZS 60065, <i>Audio, video and similar electronic apparatus - Safety requirements (IEC 60065:2014 (ED. 8.0) MOD)</i></li> <li>3 <i>Delete</i> "IEC 60320-1, <i>Appliance couplers for household and similar general purposes - Part 1: General requirements</i>" and <i>replace</i> with the following: AS/NZS 60320.1, <i>Appliance couplers for household and similar general purposes, Part 1: General requirements (IEC 60320-1, Ed.2.1 (2007) MOD)</i></li> <li>4 <i>Delete</i> "IEC 60320-2-2, <i>Appliance couplers for household and similar general purposes- Part 2.2: Interconnection couplers for household and similar equipment</i>" and <i>replace</i> with the following: AS/NZS 60320.2.2, <i>Appliance couplers for household and similar general purposes, Part 2.2: Interconnection couplers for household and similar equipment (IEC 60320-2-2, Ed.2.0 (1998) MOD)</i></li> <li>5 <i>Delete</i> "IEC 60695-2-11, <i>Fire hazard testing - Part 2.11: Glowing/hot wire based test methods - Glow-wire flammability test method for end-products</i>" and <i>replace</i> with the following: AS/NZS 60695.2.11, <i>Fire hazard testing, Part 2.11: Glowing/hot wire based test methods - Glow-wire flammability test method for end products</i></li> <li>6 <i>Delete</i> "IEC 60950-1, <i>Information technology equipment- Safety - Part 1: General requirements</i>" and <i>replace</i> with the following: AS/NZS 60950.1, <i>Information technology equipment - Safety, Part 1: General requirements (IEC 60950-1, Ed.2.2 (2013), MOD)</i></li> </ol>		<b>NOTED</b>

<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	<p>7 <i>Delete "IEC 61558-1:2017, Safety of power transformers, power supplies, reactors and similar products - Part 1: General requirements and tests" and replace with the following: AS/NZS 61558.1, Safety of Power Transformers, Power Supplies, Reactors and Similar Products, Part 1: General requirements and tests (IEC 61558-1 Ed 3, MOD)</i></p> <p>8 <i>Delete "IEC 61558-2-16, Safety of transformers, reactors, power supply units and similar products for voltages up to 1100 V - Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units" and replace with the following: AS/NZS 61558.2.16, Safety of transformers, reactors, power supply units and similar products for voltages up to 1100 V, Part 2.16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units</i></p> <p>9 <i>After "EN 50332-3, Sound system equipment: Headphones and earphones associated with personal music players- maximum sound pressure level measurement methodology - Part 3: Measurement method for sound dose management", add the following: AS/NZS 3112, Approval and test specification - Plugs and socket-outlets AS/NZS 3123, Approval and test specification - Plugs, socket-outlets and couplers for general industrial application AS/NZS 3191, Electric flexible cords AS/NZS 60884.1, Plugs and socket-outlets for household and similar purposes, Part 1: General requirements IEC 60086-2, Primary batteries - Part 2: Physical and electrical specifications</i></p>		
<b>CI 4.7</b>	<b>Equipment for direct insertion into mains socket-outlets</b>		<b>N/A</b>
<b>CI 4.7.2</b>	<p><b>Requirements</b></p> <p><i>Delete second paragraph and replace with the following:</i></p> <p>Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet conforming to AS/NZS 3112, shall conform to the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.</p> <p>Conformity is checked by inspection and, if necessary, by the tests in AS/NZS 3112.</p> <p>NOTE: Equipment with plug portions for use in countries other than Australia and New Zealand will need to conform to other countries' requirements</p>		<b>N/A</b>

AS/NZS 62368.1 Appendix ZZ				
Clause	Requirement + Test		Result - Remark	Verdict
CI 4.7.3	<b>Compliance Criteria</b> <i>Delete</i> this clause			NOTED
CI 4.8	<b>Equipment containing coin / button cell batteries</b>			N/A
CI 4.8.1	<b>General</b> After second list, <i>add</i> the following: NOTE: Refer to the Consumer Goods (Products Containing Button/Coin Batteries) Safety Standard 2020 and Consumer Goods (Products Containing Button/Coin Batteries) Information Standard 2020 for more information on button cell batteries in Australia			NOTED
CI 5.4.10.2	<b>Safeguards against transient voltages from external circuits, Test methods</b>			N/A
CI 5.4.10.2.1	<b>General</b> <i>Delete</i> the first paragraph and <i>replace</i> with the following: In Australia, the separation is checked by the test given in both Clause 5.4.10.2.2 and Clause 5.4.10.2.3 In New Zealand, the separation is checked by the test given in either 5.4.10.2.2 or 5.4.10.2.3.			N/A
Tbl 28	<i>Delete</i> Table 28, and <i>replace</i> with the following:			NOTED
Parts	Impulse test		Steady state test	
	New Zealand	Australia	New Zealand	Australia
Parts indicated in 5.4.10.1 a) <sup>a</sup>	2.5 kV	7.0 kV for hand-held telephones and headsets, 2.5 kV for other equipment.	1.5 kV	3 kV
Parts indicated in 5.4.10.1 b) and c) <sup>b</sup>	1.5 kV <sup>c</sup>		1.0 kV	1.5 kV
<sup>a</sup> Surge suppressors shall not be removed.				
<sup>b</sup> Surge suppressors may be removed, provided that such devices pass the impulse test of 5.4.10.2.2 when tested as components outside the equipment.				
<sup>c</sup> During this test, it is allowed for a surge suppressor to operate and for a sparkover to occur in a GDT.				
CI 5.4.10.2.2	1 <i>Delete</i> "NOTE" and <i>replace</i> with "NOTE 1". 2 After NOTE 1, <i>add</i> the following: NOTE 2: For Australia, the 7 kV impulse simulates lightning surges on typical rural and semi-rural network lines. NOTE 3: For Australia, the value of 2.5 kV for Clause 5.4.10.1 a) was chosen to ensure the adequacy of the insulation concerned and does not necessarily simulate likely overvoltages.			N/A

<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
<b>CI 5.4.10.2.3</b>	<p>1 <i>Delete</i> "NOTE" and <i>replace</i> with "NOTE 1".</p> <p>2 After NOTE 1, <i>add</i> the following:            NOTE 2: For Australia, where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used.            NOTE 3: The 3 kV and 1.5 kV values for Australia have been determined considering the low frequency induced voltages from the power supply distribution system.</p>		<b>N/A</b>
<b>CI 6</b>	<b>Electrically-caused fire</b>		<b>N/A</b>
<b>CI 6.6</b>	<p>After Clause 6.6, <i>add</i> the following:  <b>6.201 External power supplies, docking stations and other similar devices</b></p>		<b>NOTED</b>
<b>CI 6.201 (new)</b>	<p><b>6.201 External power supplies, docking stations and other similar devices</b></p> <p>For external power supplies, docking stations and other external devices, during and after abnormal operating conditions and during single fault conditions the output voltage -</p> <p>(a) at all ES1 outlets or connectors shall not increase by more than 10% of the output rated voltage under normal operating conditions, measured after 3 s of introducing a single fault condition and after 3 s of introducing abnormal operating conditions; and</p> <p>(b) of a USB outlet or connector shall not increase by more than 3 V or 10 % of the output rated voltage under normal operating conditions, whichever is higher, measured after 3 seconds of introducing a single fault condition and after 3 s of introducing abnormal operating conditions.</p> <p>For equipment with multiple rated voltages at the output, the requirements apply with the equipment configured for each output rated voltage in turn.</p> <p>NOTE: This is intended to reduce the possibility of battery fire or explosion in attached equipment or accessories when charging secondary lithium batteries. The 3 s measurement delay is based on IEC document 108/742/INF, TC 108, <i>Standards Interpretation Panel Question 15 - Output voltage</i>, in relation to similar requirements in IEC 62368-3:2017.</p> <p>Conformity shall be checked by measurement, taking into account the abnormal operating conditions of Annex B.3 and the simulated single fault conditions of Annex B.4.</p>		<b>N/A</b>
<b>CI 8.6</b>	<b>Stability of equipment</b>		<b>N/A</b>
<b>Tbl36</b>	<p><b>Overview of requirements and tests</b></p> <p>Footnote <sup>a</sup>, after first sentence, <i>add</i> the following:            Equipment having displays with moving images shall include "television sets and display devices"</p>		<b>NOTED</b>



<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
<b>CI 8.6.1</b>	After Clause 8.6.1, <i>add</i> the following new clauses: <b>8.6.201 Restraining device fixing point</b> <b>8.6.202 Restraining device</b>		<b>NOTED</b>
<b>CI 8.6.201 (new)</b>	<b>8.6.201 Restraining device fixing point</b> Freestanding-capable MS2 and MS3 television sets and display devices shall be provided with a fixing point to facilitate the anchoring of the equipment from toppling. The fixing point shall conform to Clause 8.7 where the fixing point uses a wall, ceiling or other structure mount. Alternatively, the fixing point shall be capable of withstanding a pull equal to the mass of the equipment in all directions without damage. Instructions for installation or instructions for use shall be provided to specify correct use of the fixing point.		<b>N/A</b>
<b>CI 8.6.202 (new)</b>	<b>8.6.202 Restraining device</b> MS2 and MS3 television sets and display devices shall be provided with a restraining device and associated hardware to attach to the television set or display device. The restraining device shall be capable of withstanding a pull equal to the mass of the equipment in all directions. Instructions for installation or instructions for use shall be provided to specify correct use of the fixing point.		<b>N/A</b>
<b>Annex F</b>	<b>Equipment markings, instructions, and instructional safeguards</b>		<b>N/A</b>
<b>Annex F.3.3.4</b>	<b>Equipment rating markings, Rated voltage</b> <i>Delete</i> "NOTE" and <i>replace</i> with "NOTE 1". After NOTE 1, <i>add</i> the following: Equipment that is intended for connection to the supply mains in Australia or New Zealand shall be marked with: (a) A rated voltage of: (i) 230 V for single phase equipment. (ii) 400 V for poly phase equipment. (b) A rated voltage range or multiple rated voltages that includes: (i) 230 V for single phase equipment. (ii) 400 V for poly phase equipment. NOTE 2: Equipment that is not rated as above is not suitable for direct connection to the supply mains in Australia or New Zealand.	Not directly connected to mains	<b>N/A</b>
<b>Annex F.3.3.5</b>	<b>Equipment rating markings, Rated frequency</b> After the list, <i>add</i> the following: Equipment that is intended for connection to the supply mains in Australia or New Zealand shall be marked with a rated frequency of 50 Hz or a rated frequency range or nominal value which includes 50 Hz.		<b>N/A</b>

<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
<b>Annex F.3.8</b>	<b>External power supply output marking</b> After "The DC output of an external power supply", <i>insert</i> "or docking stations and other similar external devices".		<b>N/A</b>
<b>Annex G</b>	<b>Components</b>		<b>N/A</b>
<b>Annex G.4.2</b>	<b>Mains connectors</b> 1 After "IEC 60320", <i>insert</i> "or AS/NZS 60320 series". 2 After "IEC 60906-1", <i>insert</i> "or AS/NZS 3123". 3 After first paragraph, <i>add</i> the following: 10 A or 15 A 250 V flat pin plugs for the connection of equipment to mains-powered socket-outlets for household or similar general use shall conform to AS/NZS 3112 or AS/ NZS 60884.1.		<b>N/A</b>
<b>Annex G.5.3.1</b>	<b>Transformers, General</b> 1 Third dash point, <i>replace</i> 'IEC 61558-1 and the relevant parts of IEC 61558-2' with 'AS/NZS 61558-1 and the relevant parts of AS/NZS 61558.2' 2 Fourth dash, point <i>replace</i> 'IEC 61558-2-16' with 'AS/NZS 61558.2.16'.		<b>N/A</b>
<b>Annex G.7.1</b>	<b>Mains supply cords, General</b> Fourth dash point, <i>replace</i> 'IEC 60320-1' with 'AS/NZS 60320.1'		<b>N/A</b>
<b>Tbl G.7</b>	<b>Sizes of conductors</b> 1 First column, second row, <i>delete</i> "6" and <i>replace</i> with "7.5". 2 Second column, second row, <i>delete</i> "0,75" and <i>replace</i> with "0.75 <sup>b</sup> ". 3 <i>Delete</i> NOTE 1. 4 <i>Delete</i> "NOTE 2" and <i>replace</i> with "NOTE". 5 <i>Delete</i> footnote b, and <i>replace</i> with the following: <sup>b</sup> This nominal cross-sectional area is only permitted for Class II appliances if the length of the power supply cord, measured between the point where the cord, or cord guard, enters the appliance, and the entry to the plug does not exceed 2 m (0.5 mm <sup>2</sup> three-core supply flexible cords are not permitted; see AS/NZS 3191). 6 Footnote c, <i>replace</i> "IEC 60320-1" with "AS/NZS 60320.1". 7 Footnote d, <i>replace</i> "IEC 60320-1" with "AS/NZS 60320.1".		<b>N/A</b>
<b>Annex M</b>	<b>Equipment containing batteries and their protection circuits</b>		<b>N/A</b>
<b>Annex M.2.1</b>	<b>Safety of batteries and their cells, Requirements</b> <i>Add</i> "IEC 60086-2" to the list.		<b>N/A</b>

<b>AS/NZS 62368.1 Appendix ZZ</b>			
Clause	Requirement + Test	Result - Remark	Verdict
<b>Annex M.3.2</b>	<p><b>Protection circuits for batteries provided within the equipment, Test method</b></p> <p><i>Delete</i> "NOTE" and <i>replace</i> with "NOTE 1".</p> <p>After NOTE 1, <i>add</i> the following:</p> <p>NOTE 2: In cases where the voltage source is provided by power from an unassociated power source, consideration should be given to the effects of possible single fault conditions in the unassociated equipment. If the power source is unknown, then it should be assumed that the maximum limit of ES1 may be applied to the source input under assumed single fault conditions in the source when assessing the charging circuit in the equipment under test.</p>		<b>N/A</b>

**AS/NZS 62368.1 Appendix ZZ**

Clause	Requirement + Test	Result - Remark	Verdict
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4.1.2	Table: List of critical components					N/A
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity <sup>1</sup>	
Supplementary information:						
<sup>1)</sup> Provided evidence ensures the agreed level of compliance. See OD-CB2039. <sup>2)</sup> Description line content is optional. Main line description needs to clearly detail the component used for testing						

5.4.9	Table: Electric strength tests			N/A
Test voltage applied between:	Voltage shape (AC, DC, Impulse)	Test voltage (V)	Breakdown Yes / No	
Supplementary information:				

6.201	Table: External power supplies, docking stations and other similar devices						N/A
Type / Connector	Rated voltage	Operating Condition (Abnormal / Single Fault)	Measured voltage	Allowed increase	Measured increase	Verdict	
Supplementary information:							

6.202	Table: Resistance to fire – Alternative tests			N/A
Part	Test applied	Test temperature (°C)	Observation	
Supplementary information:				