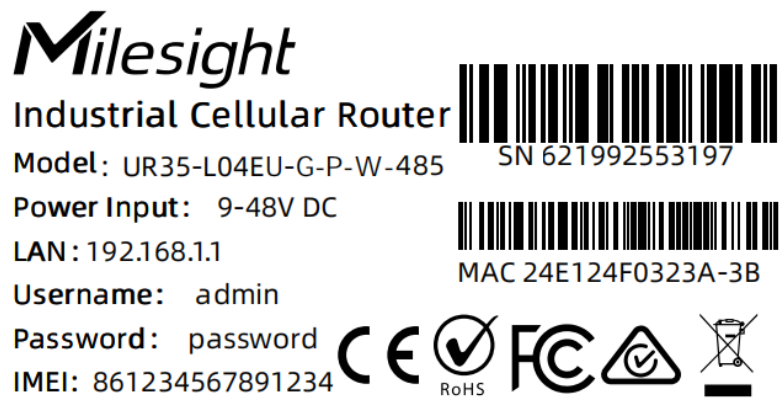


| | |
|--|---|
| <p>TEST REPORT</p> <p>EN IEC 62368-3</p> <p>Audio/video, information and communication technology equipment</p> <p>Part 3: Safety aspects for DC power transfer through communication cables and ports</p> | |
| Report reference No | XMDN220429-17583E-SF |
| Compiled by (+ signature) | Engineer: Cloud Zheng |
| Approved by (+ signature) | Team Leader: Eric Ding |
| Date of issue | 2022-08-26 |
| Testing laboratory | Bay Area Compliance Laboratories Corp. (Dongguan) |
| Address | No.12, Pulong East 1 st Road, Tangxia Town, Dongguan, Guangdong, China |
| Testing location | See above |
| Applicant's name | Xiamen Milesight IoT Co., Ltd. |
| Address..... | Building C09, Software Park Phase III, Xiamen 361024, Fujian, China |
| Manufacturer's name..... | Xiamen Milesight IoT Co., Ltd. |
| Address..... | Building C09, Software Park Phase III, Xiamen 361024, Fujian, China |
| Factory s name..... | N/A |
| Address..... | N/A |
| Standard | EN IEC 62368-3:2020 for use in conjunction with EN IEC 62368-1:2020+A11:2020 |
| Test sample(s) received | 2022-05-27 |
| Test in period..... | 2022-06-05 to 2022-06-20 |
| Procedure deviation | N/A |
| Non-standard test method | N/A |

Type of test object : Industrial Cellular Router
 Trademark : Milesight
 Model/type reference : See Page 3 & 4 General product information for detail
 Manufacturer..... : Xiamen Milesight IoT Co., Ltd.
 Rating..... : EUT input: 9-48V

Copy of marking plate:
 The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



- The CE marking and WEEE symbol (if any) should be at least 5.0mm and 7.0mm respectively in height.
- Manufacturers shall ensure that the equipment bears a type, batch or serial number or other element allowing its identification.
- Manufacturers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted.
- Importers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted.

| | |
|--|---|
| Test item particulars: | See referred EN IEC 62368-1 test report. |
| Supply Connection.....: | <input type="checkbox"/> AC Mains <input type="checkbox"/> DC Mains <input type="checkbox"/> Battery <input checked="" type="checkbox"/> External Circuit - not directly connected to the mains <input checked="" type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3 |
| Class of equipment.....: | <input type="checkbox"/> Class I <input type="checkbox"/> Class II <input checked="" type="checkbox"/> Class III |
| Equipment type.....: | <input type="checkbox"/> PSE power sourcing equipment <input checked="" type="checkbox"/> PD powered device <input type="checkbox"/> connected to ICT network <input type="checkbox"/> RFT circuit (remote feeding telecom circuit) |
| Possible test case verdicts: | |
| - test case does not apply to the test object.....: | N(N/A) |
| - test object does meet the requirement.....: | P(ass) |
| - test object does not meet the requirement.....: | F(ail) |
| General remarks: | |
| <p>”(see remark #)” refers to a remark appended to the report. (see appended table)” refers to a table appended to the report. 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 testing laboratory. Throughout this report a <input type="checkbox"/>comma/ <input checked="" type="checkbox"/>point is used as the decimal separator.</p> | |

| Summary of testing: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|------------|-----|------|------|------------------|-------------|---|---|---|----------------|-------------|---|----|---|----------------|-------------|---|---|----|----------------|-------------|----|---|---|--------------|-------------|----|----|---|
| All tests were performed at the worst case and all test results complied with the standard on the cover page. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General product information: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ol style="list-style-type: none"> The EUT is a Industrial Cellular Router that was supplied by 9-48V$\overline{=}$ or 48V$\overline{=}$ 1.25A adapter. The adapter output is ES1 and PS2 circuit. The maximum ambient temperature is 70 °C for 9-48Vdc, 45 °C for 48Vdc adapter. Before placing the products in the different countries, the manufacturer must ensure that: Operating Instructions, Ratings Labels and Warnings Labels are in an Accepted or Official Language of the country in question; The equipment complies with the National Standards and/or Electrical Codes of the country, province or city or in question. The test sample No.: XMDN220429-17583E-SF-S1 All tests were performed on model UR35-L04EU-G-P-W-485 The EUT contains a variety of configuration. was represent configuration information and see below table. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Model No.</th> <th>LTE module</th> <th>PoE</th> <th>GPS</th> <th>WIFI</th> </tr> </thead> <tbody> <tr> <td>UR35-L04EU-G-P-W</td> <td>√(EC25-EUX)</td> <td>√</td> <td>√</td> <td>√</td> </tr> <tr> <td>UR35-L04EU-P-W</td> <td>√(EC25-EUX)</td> <td>√</td> <td>--</td> <td>√</td> </tr> <tr> <td>UR35-L04EU-G-P</td> <td>√(EC25-EUX)</td> <td>√</td> <td>√</td> <td>--</td> </tr> <tr> <td>UR35-L04EU-G-W</td> <td>√(EC25-EUX)</td> <td>--</td> <td>√</td> <td>√</td> </tr> <tr> <td>UR35-L04EU-W</td> <td>√(EC25-EUX)</td> <td>--</td> <td>--</td> <td>√</td> </tr> </tbody> </table> | Model No. | LTE module | PoE | GPS | WIFI | UR35-L04EU-G-P-W | √(EC25-EUX) | √ | √ | √ | UR35-L04EU-P-W | √(EC25-EUX) | √ | -- | √ | UR35-L04EU-G-P | √(EC25-EUX) | √ | √ | -- | UR35-L04EU-G-W | √(EC25-EUX) | -- | √ | √ | UR35-L04EU-W | √(EC25-EUX) | -- | -- | √ |
| Model No. | LTE module | PoE | GPS | WIFI | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UR35-L04EU-G-P-W | √(EC25-EUX) | √ | √ | √ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UR35-L04EU-P-W | √(EC25-EUX) | √ | -- | √ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UR35-L04EU-G-P | √(EC25-EUX) | √ | √ | -- | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UR35-L04EU-G-W | √(EC25-EUX) | -- | √ | √ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UR35-L04EU-W | √(EC25-EUX) | -- | -- | √ | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | |
|----------------------|-------------|----|----|----|
| UR35-L04EU-G | √(EC25-EUX) | -- | √ | -- |
| UR35-L04EU-P | √(EC25-EUX) | √ | -- | -- |
| UR35-L04EU | √(EC25-EUX) | -- | -- | -- |
| UR35-L04EU-G-P-W-485 | √(EC25-EUX) | √ | √ | √ |
| UR35-L04EU-P-W-485 | √(EC25-EUX) | √ | -- | √ |
| UR35-L04EU-G-P-485 | √(EC25-EUX) | √ | √ | -- |
| UR35-L04EU-G-W-485 | √(EC25-EUX) | -- | √ | √ |
| UR35-L04EU-W-485 | √(EC25-EUX) | -- | -- | √ |
| UR35-L04EU-G-485 | √(EC25-EUX) | -- | √ | -- |
| UR35-L04EU-P-485 | √(EC25-EUX) | √ | -- | -- |
| UR35-L04EU-485 | √(EC25-EUX) | -- | -- | -- |

1) Symbol "√" in the table above represents "with the corresponding module" while "--" "without the corresponding module"

| ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE: |
|---|
| See referred EN IEC 62368-1 test report. The EN IEC 62368-1:2020+A11:2020 report No.: XMDN220429-17582E-SF issued by Bay Area Compliance Laboratories Corp. (Dongguan) |

| ENERGY SOURCE DIAGRAM |
|---|
| Indicate which energy sources are included in the energy source diagram. Insert diagram below |
| See referred EN IEC 62368-1 test report. The EN IEC 62368-1:2020+A11:2020 report No.: XMDN220429-17582E-SF issued by Bay Area Compliance Laboratories Corp. (Dongguan) |

| OVERVIEW OF EMPLOYED SAFEGUARDS |
|---|
| See referred EN IEC 62368-1 test report. The EN IEC 62368-1:2020+A11:2020 report No.: XMDN220429-17582E-SF issued by Bay Area Compliance Laboratories Corp. (Dongguan) |

| EN IEC 62368-3 | | | |
|----------------|---|--------------------------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 4 | GENERAL REQUIREMENTS | | P |
| | Equipment serving as a PD or a PSE using voltages at ES1 or ES2, | PoE input port comply with ES1 | P |
| | Equipment used as PSE or PD with proprietary connectors | No such proprietary connectors | N/A |
| | Equipment where a proprietary protocol is used to enable the power transfer | No such proprietary protocol | N/A |
| 5 | POWER TRANSFER USING ES1 OR ES2 VOLTAGES | | P |
| 5.1 | General requirements | | N/A |
| | Maximum rated output voltage of PSE (V) | | — |
| | under conditions of no load (V) | | — |
| | normal load (V) | | — |
| | maximum rated load (V) | | — |
| | Rated limits of intended communication systems: | | N/A |
| | PD or PSE have the capability to both provide power and receive power | | N/A |
| 5.2 | Electrical-caused injury, electrical sources and safeguards | | N/A |
| | For a PSE classified as ES1 and ES2, the requirements of IEC 62368-1 clause 5.2 apply. | | N/A |
| 5.3 | Electrical-caused fire, power sources and safeguards | | N/A |
| 5.3.1 | Output power reduces the likelihood of ignition. | | N/A |
| | Output current does not cause damage to communication cables, building wiring, and other devices including PD. | | N/A |
| | PSE circuits comply with IEC 62368 1, Annex Q.1 requirements for limited power source (LPS). | | N/A |
| | Interconnection of PSE circuits to other devices for DC power transfer via building wiring | | N/A |
| | PSE maximum continuous current (A) | | — |
| | Minimum wire gauge specified in the equipment installation instruction (mm ² or AWG) | | — |
| | Current limits of minimum wire gauge (A) | | — |
| | PD receives multiple PSE power inputs. PD implements power limiting in accordance with PS2 or IEC 62368-1, Annex Q | | N/A |
| | PSE connected to external paired conductor cable having a minimum wire diameter of 0.4 mm (IEC 62368-1:2014, Table 14, ID 1 and 2 IEC 62368-1:2018, Table 13, ID 1 and 2) | | N/A |

| EN IEC 62368-3 | | | |
|----------------|--|-------------------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | Current limited to not more than 1.3 A.....: | | — |
| 5.3.2 | DC power transfer interconnection to other equipment, where it is unknown that attached devices are likely to comply with IEC 62368-1, PSE circuit shall comply with requirements of IEC 62368-1 for PS2 or Clause Q.1 | | N/A |
| | Available output current under abnormal operating conditions and single fault conditions in the PSE does not exceed the specified fault current rating in power delivery specification. | | N/A |
| | Fault current rating in power delivery specification (A).....: | | — |
| | Available output current under abnormal operating conditions and single fault conditions in the PSE (A)..... : | | — |
| | No prescribed maximum fault current specified for standardized interface. Available current not exceeding: | | N/A |
| | 8.0 A under any circumstances | | N/A |
| | Circuits > 2 A, 130% for more than 5 s.....: | | N/A |
| | Circuits ≤ 2 A, 150% for more than 5 s:.....: | | N/A |
| 5.4 | Safeguards to protect against a single fault condition in the PSE | | P |
| 5.4.1 | Requirement for the PSE | | N/A |
| | PSE with a single output voltage | | N/A |
| | Nominal rated output voltage (V) | | — |
| | Single fault conditions output voltage (V).....: | | — |
| | ES2 limit (DC 120V, 50V RMS, 70.7 V peak) | | N/A |
| | PSE delivering a range of output voltages via negotiation with the PD | | N/A |
| | Single fault conditions output voltage (V).....: | | — |
| | Negotiated > 5 V, output 130% (min. 7.5 V) | | N/A |
| | Negotiated ≤ 5 V, output 150% | | N/A |
| 5.4.2 | Requirement for the PD | | P |
| | Nominal rated input voltage (V).....: | 48Vdc PoE | — |
| | Nominal > 5 V, supplied with 130% (min. 7.5 V) : | 62.4Vdc | P |
| | Nominal ≤ 5 V supplied with 150%.....: | | N/A |
| | Any consequential failure of components in the PD | After test, no hazards. | P |
| 6 | Power transfer using RFT | | N/A |

| EN IEC 62368-3 | | | |
|----------------|---|----------------------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 6.1 | General requirements | | N/A |
| | Access to RFT circuit conductors is restricted to a skilled person | | N/A |
| | Access by an instructed person is restricted in accordance with IEC 62368-1, clause 5.3.2.1 and 5.3.2.2 | | N/A |
| 6.2 | Connection to ICT networks | | N/A |
| | RFT circuit directly connected to an ICT network: | | N/A |
| 6.3 | Electrically caused injury | | N/A |
| 6.3.1.1.1 | The current limits in 6.3.1.1.2 to 6.3.1.1.4 are inherently met. | See appended table 6.3.1.1 | N/A |
| | The RFT-C circuit has a monitoring and control device that maintains the required current limits | | N/A |
| 6.3.1.1.2 | Limits under normal operating conditions | | N/A |
| | a) steady state current from supply equipment into ICT network under any load condition (mA) | | N/A |
| | b) using a resistor of $2\,000\ \Omega \pm 2\%$, max. steady state current from one conductor of equipment through ICT network to earth (mA) | | N/A |
| | c) RFT-C circuit is limited to voltage rating of ICT network wiring, if this voltage is known (V) | | N/A |
| | d) RFT-C circuit voltage rating of insulation between conductors and from any conductor to earth is coordinated with max. RFT-C circuit supply equipment voltage (V) | | N/A |
| 6.3.1.1.3 | Current measured under single fault conditions did not exceed the line-to-earth and line-to-line limits in Figure 1 | See appended table 6.3.1.1 | N/A |
| 6.3.1.1.4 | Current limits with one RFT-C conductor accidentally earthed, between the other conductor and earth measured through a $2\,000\ \Omega \pm 2\%$ resistor, under any external load condition | | N/A |
| | Current not exceeding line-to-earth limits in Figure 1 with a limit of 25 mA after 10 s | | N/A |
| | Open circuit voltage between other conductor and earth not exceeding maximum RFT-C circuit voltage determined in 6.3.1.1.2 c) and 6.3.1.1.2 d), after 2 s | | N/A |
| 6.3.1.2 | RFT-V circuit limits | See appended table 6.3.1.2 | N/A |
| 6.3.1.2.1 | Limits under normal operating conditions | | N/A |

| EN IEC 62368-3 | | | |
|----------------|--|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | Steady state open circuit voltage between earth and each RFT-V circuit conductor that normally connects to an ICT network, not exceeding (V) - 140 V DC: - 200 V DC with monitoring and control device in accordance with 6.3.1.2.3 | | N/A |
| | Voltage rating of insulation of RFT-V circuit receiving power via ICT network is suitable for - 400 V between conductors and - 200 V from any conductor to earth | | N/A |
| 6.3.1.2.2 | Voltage limits within RFT-V circuit supply equipment under single fault conditions (see IEC 62368-1, clause B.4) | | N/A |
| | with any conductor of RFT-V circuit that normally connects to ICT network being earthed (V).....: | | — |
| | without any conductor of RFT-V circuit that normally connects to ICT network being earthed (V) | | — |
| | Not exceeding Figure 2 limits during first 200 ms, measured across a 5 000 $\Omega \pm 2\%$ resistor with all load circuits disconnected | | N/A |
| | Not exceeding 6.3.1.2.1 limits after first 200 ms | | N/A |
| 6.3.1.2.3 | Voltage limits with one RFT-V conductor earthed, between the other conductor and earth: | | N/A |
| | Not exceeding maximum RFT-V circuit supply voltage after 200 ms (V) | | N/A |
| | For RFT-V circuits with normal open circuit voltage exceeding 140 V DC, current between the other conductor and earth not exceeding Figure 1 line-to-earth limits, measured through a 2 000 $\Omega \pm 2\%$ resistor, under any external load condition.....: | | N/A |
| | This current not exceeding 10 mA DC after 10 s ...: | | N/A |
| 6.3.2 | Accessibility to electrical energy sources and safeguards (See also IEC 62368-1, 5.3.2) | | N/A |
| 6.3.2.1 | Accessibility for an ordinary person | | N/A |
| | Adequate protection against contact with RFT circuits bare parts for all positions of the equipment wired and operated as in normal use. | | N/A |
| | Not accessible: bare parts at ES3; and an ES3 basic safeguard | | N/A |
| | Not accessible: bare parts at ES2, except for pins of connectors. However, such pins are not accessible under normal operating conditions by IEC 62368-1, Figure V.3 blunt probe | | N/A |

| EN IEC 62368-3 | | | |
|----------------|---|--------------------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | Protection achieved by insulation, guarding (electrical enclosure), interlocks | See appended table 4.1.2 | N/A |
| 6.3.2.2 | Accessibility for an instructed person (See also IEC 62368-1, clause 4.3.3) | | N/A |
| | Contact is possible with RFT circuit bare parts by the IEC 62368-1, Figure V.3 blunt probe | | N/A |
| | RFT circuit bare parts so located or guarded that unintentional contact is unlikely. | | N/A |
| 6.3.2.3 | Accessibility for a skilled person (See also IEC 62368-1, clause 4.3.4 and 5.3) | | N/A |
| | RFT circuits bare parts located or guarded so that accidental shorting to ES1 or ES2 parts is unlikely | | N/A |
| | Required guards easily removable and replaceable if necessary for servicing. | | N/A |
| 6.3.3 | Safeguards | | N/A |
| 6.3.3.1 | RFT circuits separated from other circuits and parts | | N/A |
| | from other RFT circuits by functional insulation. If shorted, neither circuit exceeds 6.3.1.1 and 6.3.1.2 limits | | N/A |
| | from other RFT circuits separated as if one was at ES3 | | N/A |
| | from earthed accessible parts, earthed ES1 circuits and earthed ES2 circuits by basic insulation | | N/A |
| | from unearthed accessible parts, ES1, ES2 and ES3 circuits by one or both: • double insulation or reinforced insulation; • basic insulation, together with a conductive screen as protective bonding conductor. | | N/A |
| 6.3.3.2 | Interconnection of equipment | | N/A |
| 6.3.3.2.1 | General requirements..... | | N/A |
| | Interconnecting cable containing more than one type of circuit..... | | N/A |
| 6.3.3.2.2 | Interconnection between RFT circuits | | N/A |
| | RFT-C circuits in supply equipment are connected to RFT-C circuits in other equipment | | N/A |
| | RFT-V circuits in supply equipment are connected to RFT-V circuits in other equipment | | N/A |
| 6.3.4 | Installation instructions for equipment using an RFT circuit do specify: | | N/A |
| 6.3.4 a) | RFT circuit voltage (V)..... | | N/A |

| EN IEC 62368-3 | | | |
|----------------|---|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 6.3.4 b) | EUT effective capacitance between connection points | | N/A |
| | 1) for the ICT network conductors (nF).....: | | — |
| | 2) for ICT network one conductor and earth (nF): | | — |
| 6.3.4 c) | A system assessment shall be carried out at the time of installation, to ensure: | | N/A |
| | Effective capacitance of the total system, including the capacitance of the EUT, does not exceed the values specified in Figure 3 | | N/A |
| 6.3.4 d) | Checking is done that the voltage rating of ICT network wiring is adequate for normal RFT circuit voltage, together with superimposed transients ..: | | N/A |
| 6.3.4 e) | Checking is done that circuits to be connected together are either all RFT-C circuits or all RFT-V circuits | | N/A |
| 6.3.4 f) | Where an RFT circuit is directly connected to an ICT network, that the building cabling termination records are updated to indicate which terminals are used for an RFT circuit | | N/A |
| 6.4 | Electrically caused fire | | N/A |
| 6.4.1 | Classification of RFT power sources | | N/A |
| 6.4.1.1 | RFT-C power source is a PS2 circuit (See IEC 62368-1, clause 6.2.2.5 or 6.2.2.6).....: | | N/A |
| | RFT-C circuit limited by maximum current (60 mA) and maximum voltage (usually < 800 V). | | N/A |
| | RFT-C circuits comply with requirements of 6.4.2. | | N/A |
| 6.4.1.2 | RFT-V power source is a PS2 circuit (See IEC 62368-1, clause 6.2.2.5) | | N/A |
| | RFT-V circuits comply with requirements of 6.4.2. | | N/A |
| 6.4.2 | Fire protection requirements | | N/A |
| | RFT circuit power in accordance with Table 1 | | N/A |
| | Output voltage (V) | | — |
| | Maximum current (A) | | — |
| | Maximum Power (W) | | — |
| | Steady state current that can be supplied to ICT network complies with IEC 62368-1:2014, 6.5.3 IEC 62368-1:2018, 6.5.2 | | N/A |

| EN IEC 62368-3 | | | |
|----------------|--------------------|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |

| 5.1 | Table: Power transfer using ES1 or ES2 voltages. General requirements | | | | N/A |
|------------------|---|----------------------|-------------|-----------------|--------|
| Output Connector | Components | Output voltage V dc) | | | |
| | | No load | Normal load | Max. rated road | Limits |
| -- | -- | -- | -- | -- | -- |
| -- | -- | -- | -- | -- | -- |

Supplementary Information:

| 5.3.2 | TABLE: DC power transfer interconnection to other equipment | | | | | N/A |
|---|---|--------------------------|----------------------|-------|-------------------|-------|
| Note: Measured each port with maximum attainable current: | | | | | | |
| Output Circuit | Components | Fault current rating (A) | Any circumstance (A) | | More than 5 s (A) | |
| | | | Meas. | Limit | Meas. | Limit |
| -- | -- | -- | -- | -- | -- | -- |

Supplementary Information: Fault current rating: > 2 A, limit 130%, ≤ 2 A, limit 150%
Fault conditions tested: SC=Short circuit, OC=Open circuit

| 5.4.1 | TABLE: Requirement for the PSE | | | | N/A |
|---|--------------------------------|---------------------|-------------|-------|-------------------------|
| Note: Measured U fault (V) with all load circuits disconnected: | | | | | |
| Output Circuit | Components | U nominal rated (V) | U fault (V) | | Fault conditions tested |
| | | | Meas. | Limit | |
| -- | -- | -- | -- | -- | -- |

Supplementary Information:
Fault conditions tested: SC=Short circuit, OC=Open circuit

| 5.4.2 | TABLE: Requirement for the PD | | | | P | |
|--|-------------------------------|---------------------|-------------|-------|-------------|-------------------------|
| Note: Measured U input at PSE with all other load circuits disconnected: | | | | | | |
| Input Circuit | Components | U nominal rated (V) | U input (V) | | Observation | |
| | | | Meas. | Limit | Component | Hazard |
| 48Vdc PoE | -- | 48Vdc | 62.4V | 120 | -- | After test, no hazards. |

Supplementary Information: Conditions tested: PD supplied with voltage above nominal rated input voltage.
Nominal > 5 V, supplied with 130% (min. 7.5 V)
Nominal ≤ 5 V supplied with 150%

| EN IEC 62368-3 | | | |
|----------------|--------------------|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |

| 6.3.1.1 | | TABLE: RFT-C circuit limits | | | | | N/A |
|---------|----------------|-------------------------------------|-------------------------|------------|-----------|-------|-----|
| No. | Supply Voltage | Location (e.g. circuit designation) | Test conditions | Parameters | | | |
| | | | | U (V DC) | I (mA DC) | limit | |
| 1 | -- | -- | Normal load | -- | -- | 60 mA | -- |
| | | | Abnormal load | -- | -- | 60 mA | |
| | | | To earth | -- | -- | 2 mA | |
| | | | Single fault | -- | -- | 60 mA | |
| | | | Single fault – to earth | -- | -- | 25 mA | |
| 2 | -- | -- | Normal load | -- | -- | 60 mA | -- |
| | | | Abnormal load | -- | -- | 60 mA | |
| | | | To earth | -- | -- | 2 mA | |
| | | | Single fault – | -- | -- | 60 mA | |
| | | | Single fault – to earth | -- | -- | 25 mA | |

Supplementary information:
 1) Current flow from the RFT-C CIRCUIT supply equipment into the TELECOMMUNICATION NETWORK
 2) Current flow from one conductor of the RFT-C CIRCUIT supply equipment through the TELECOMMUNICATION NETWORK to earth. Use of a resistor of 2000 Ω ±2 %

| 6.3.1.2 | | TABLE: RFT-V circuit limits | | | | | N/A |
|---------|----------------|-------------------------------------|------------------------------------|------------|-----------|----------|-----|
| No. | Supply Voltage | Location (e.g. circuit designation) | Test conditions | Parameters | | | |
| | | | | U (V DC) | I (mA DC) | limit | |
| 1 | -- | -- | Open circuit | -- | -- | 140 V | -- |
| | | | Open circuit, monitored | -- | -- | 200 V | |
| | | | Single fault – < 200 ms | -- | -- | Figure 2 | |
| | | | Single fault – > 200 ms | -- | -- | 140 V | |
| | | | Single fault – > 200 ms, monitored | -- | -- | 200 V | |
| | | | Conductor earthed > 200 ms | -- | -- | Figure 1 | |
| | | | Conductor earthed > 10 s | -- | -- | 10 mA | |
| 2 | -- | -- | Open circuit | -- | -- | 140 V | -- |
| | | | Open circuit, monitored | -- | -- | 200 V | |

| EN IEC 62368-3 | | | |
|----------------|--------------------|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |

| | | | | | |
|--|--|------------------------------------|----|----|----------|
| | | Single fault – < 200 ms | -- | -- | Figure 2 |
| | | Single fault – > 200 ms | -- | -- | 140 V |
| | | Single fault – > 200 ms, monitored | -- | -- | 200 V |
| | | Conductor earthed > 200 ms | -- | -- | Figure 1 |
| | | Conductor earthed > 10 s | -- | -- | 10 mA |

Test Conditions:

Normal –

Abnormal -

Supplementary information: SC=Short Circuit, OC=Open Circuit

| 4.1.2 TABLE: List of critical components * | | | | | P |
|--|-------------------------|--------------|----------------|----------|------------------------------------|
| Object / part No. | Manufacturer/ trademark | Type / model | Technical data | Standard | Mark(s) of conformity ¹ |
| -- | -- | -- | -- | -- | -- |
| -- | -- | -- | -- | -- | -- |

Supplementary information: *See referred EN IEC 62368-1 test report.

The EN IEC 62368-1:2020+A11:2020 report No.: XMDN220429-17582E-SF issued by Bay Area Compliance Laboratories Corp. (Dongguan)

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-2039.

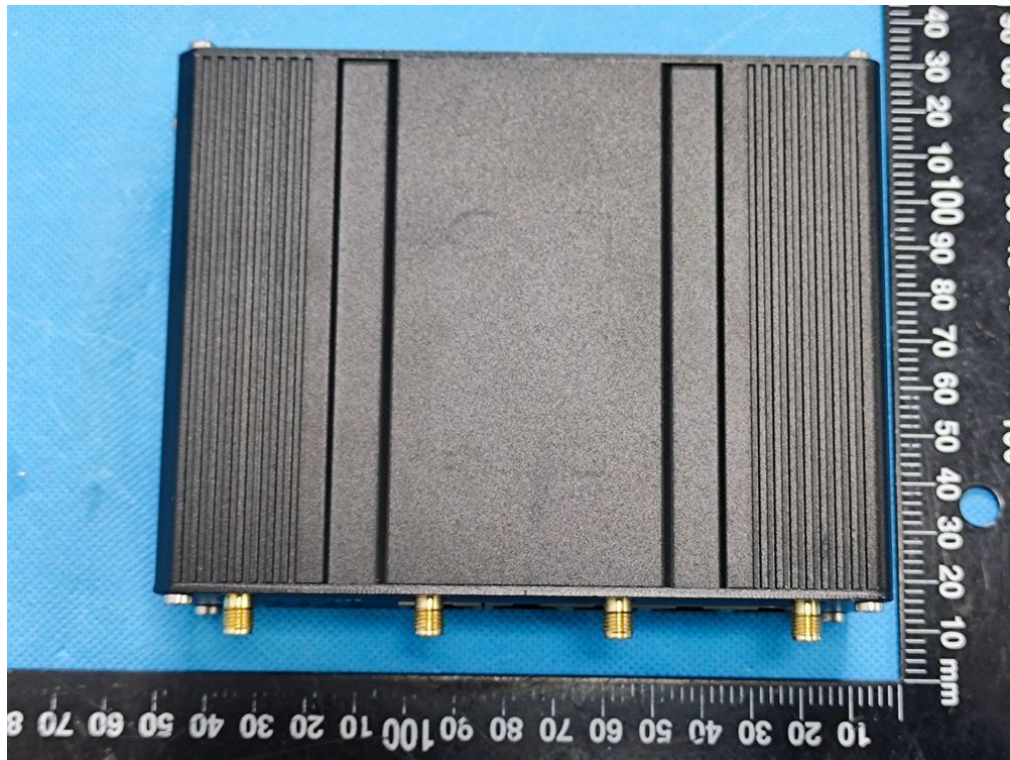
²⁾ Description line content is optional. Main line description needs to clearly detail the component used for testing

Appendix A - EUT PHOTOS

EUT- All over view for model UR35-L04EU-G-P-W-485



EUT- Top view for model UR35-L04EU-G-P-W-485



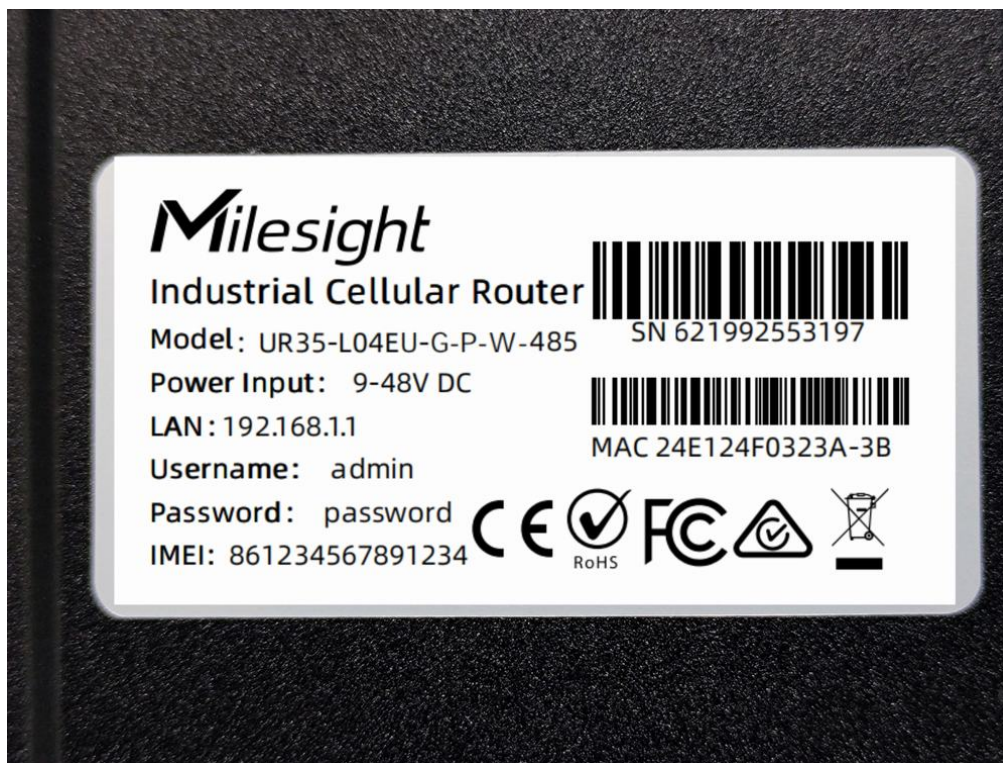
EUT- Side view for model UR35-L04EU-G-P-W-485



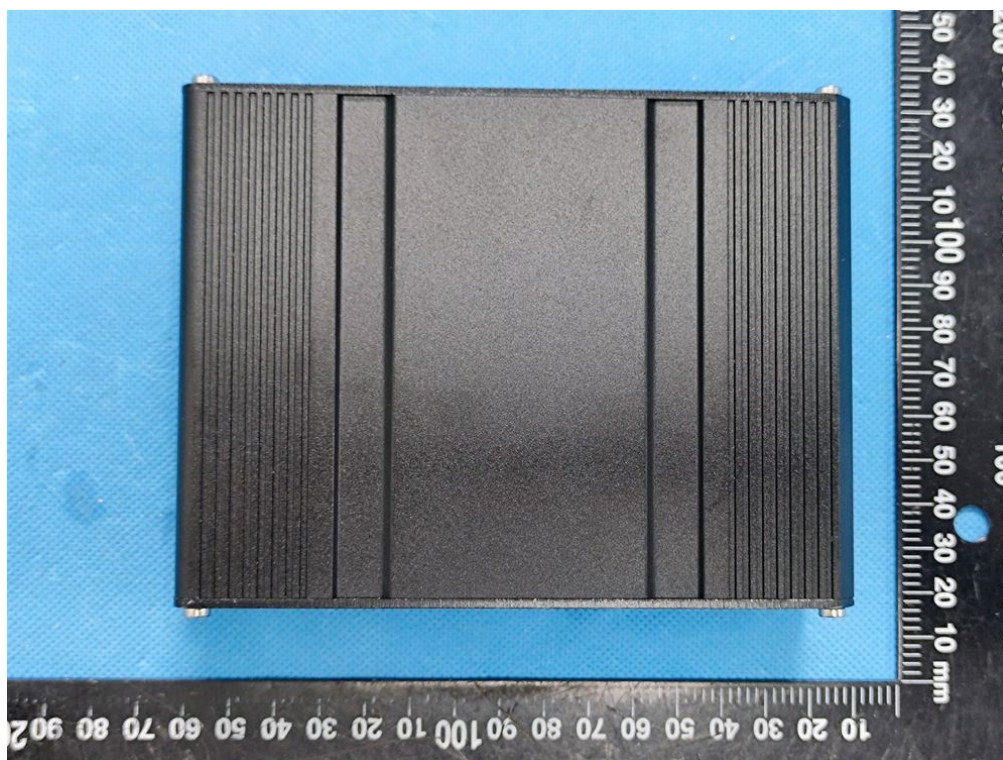
EUT- Bottom view for model UR35-L04EU-G-P-W-485



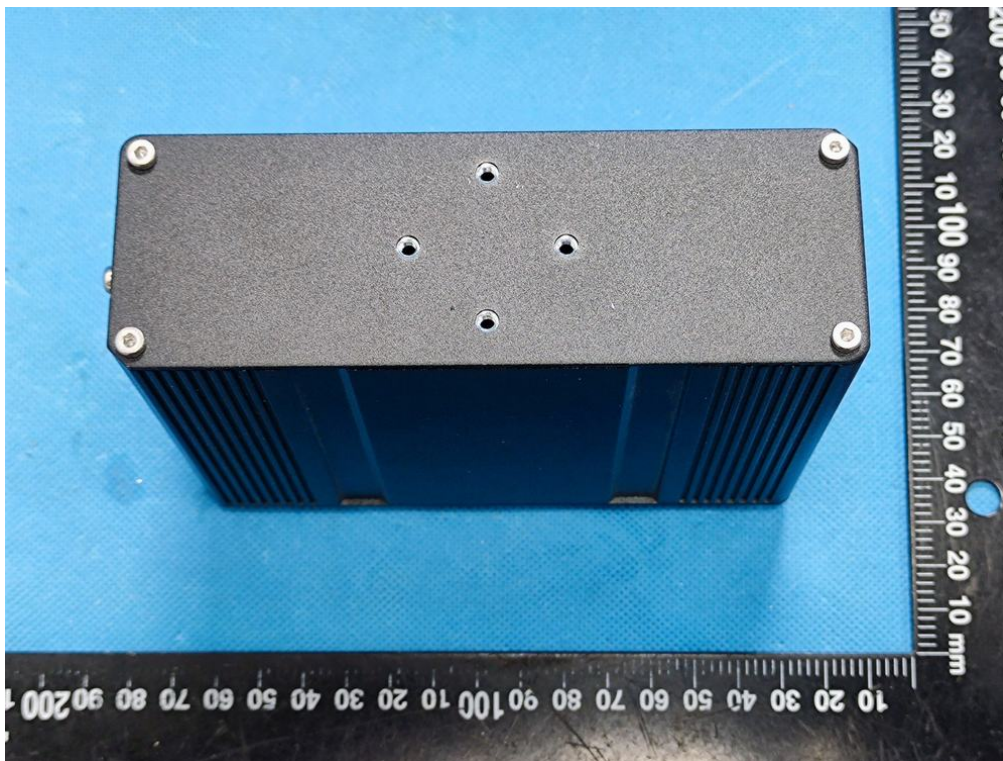
EUT- Label view for model UR35-L04EU-G-P-W-485



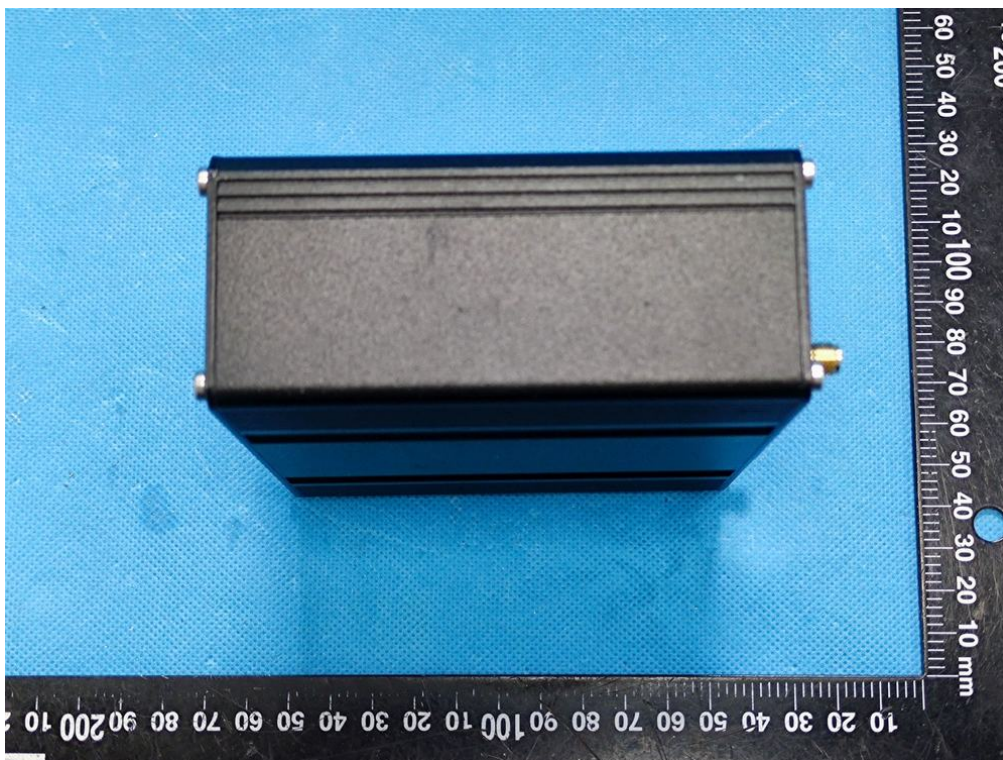
EUT- Bottom view for model UR35-L04EU-G-P-W-485



EUT- Side view for model UR35-L04EU-G-P-W-485



EUT- Side view for model UR35-L04EU-G-P-W-485



EUT- Side view for model UR35-L04EU-G-P-W-485



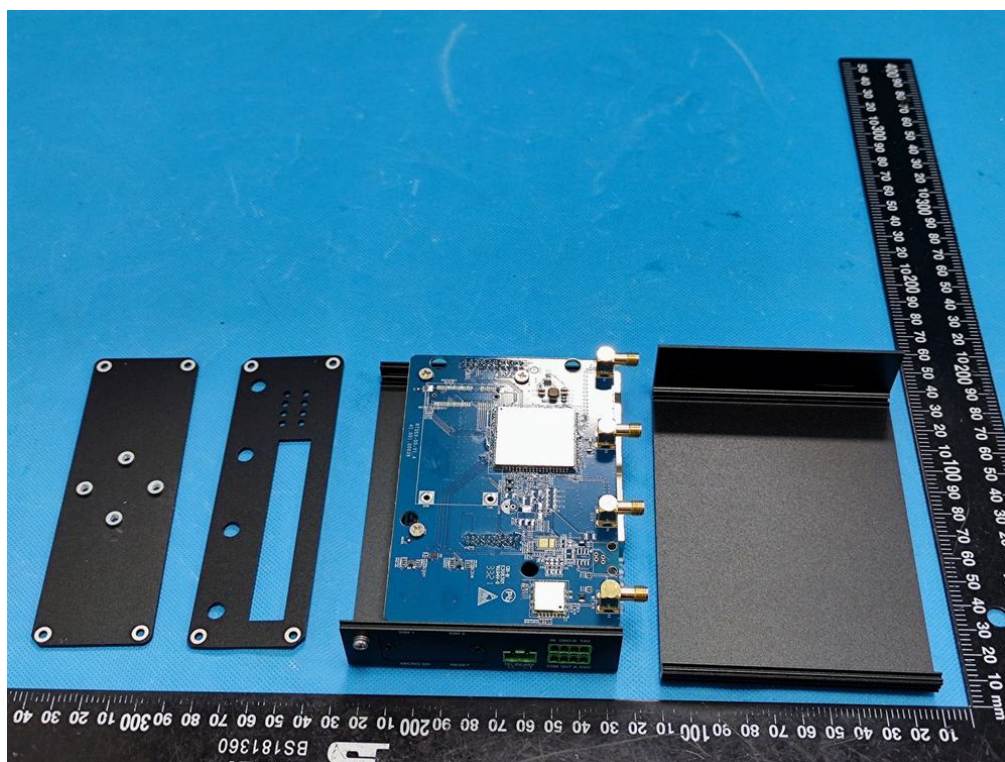
EUT- Port view for model UR35-L04EU-G-P-W-485



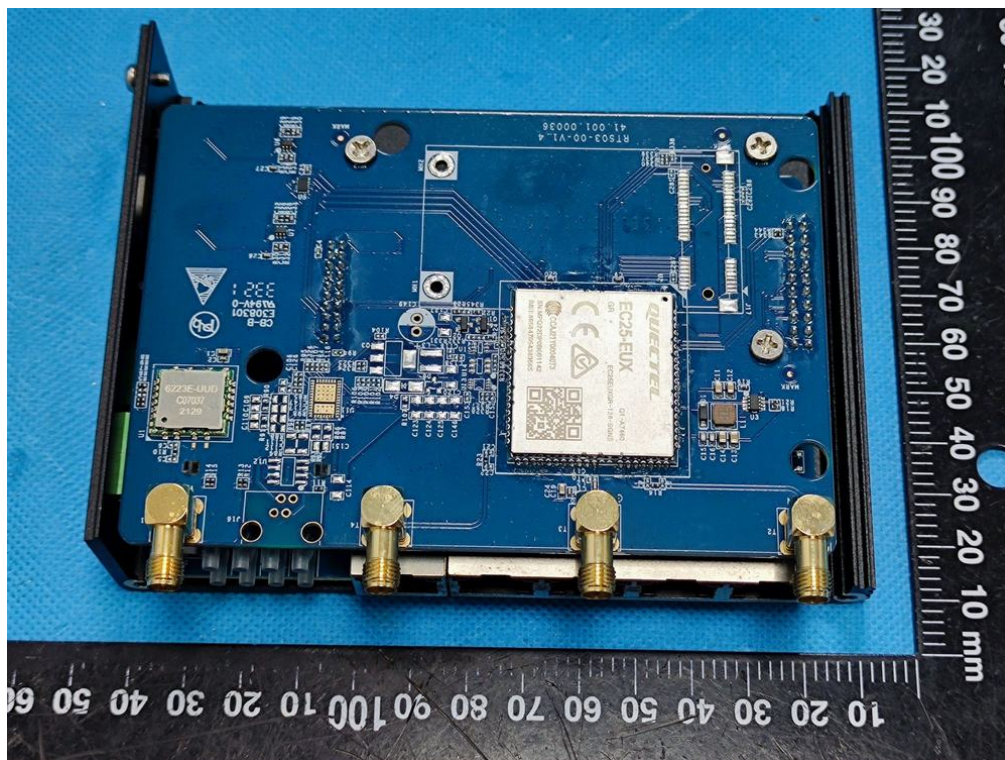
EUT- Port view for model UR35-L04EU-G-P-W-485



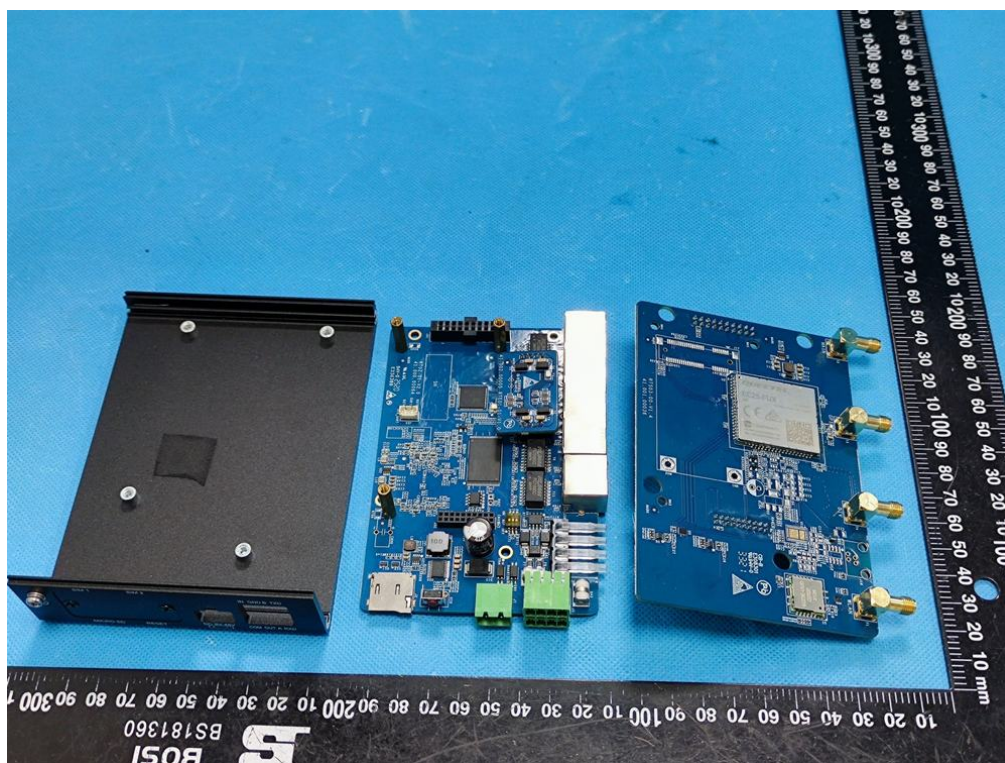
EUT- Uncover view for model UR35-L04EU-G-P-W-485



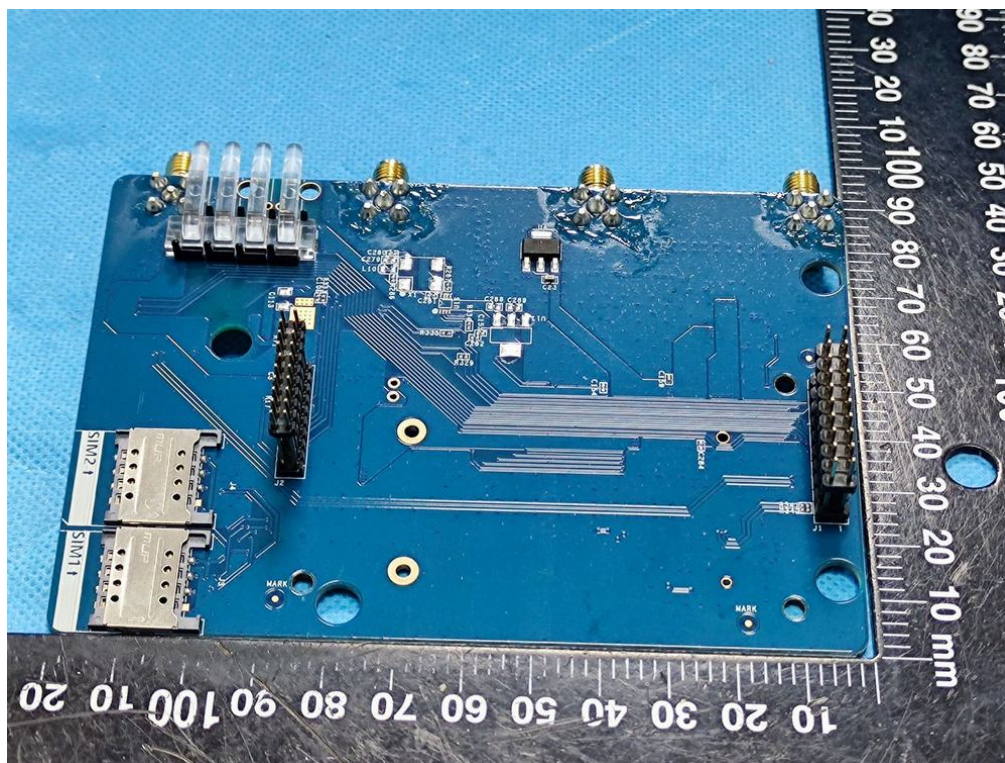
EUT- Uncover view for model UR35-L04EU-G-P-W-485



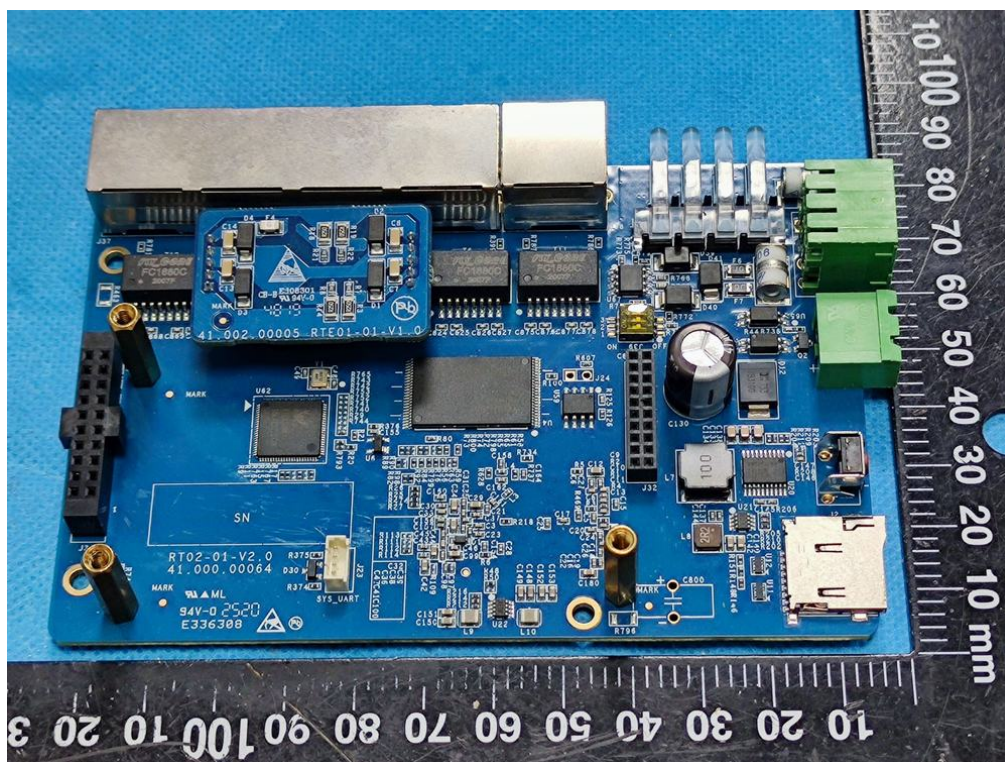
EUT- Uncover view for model UR35-L04EU-G-P-W-485



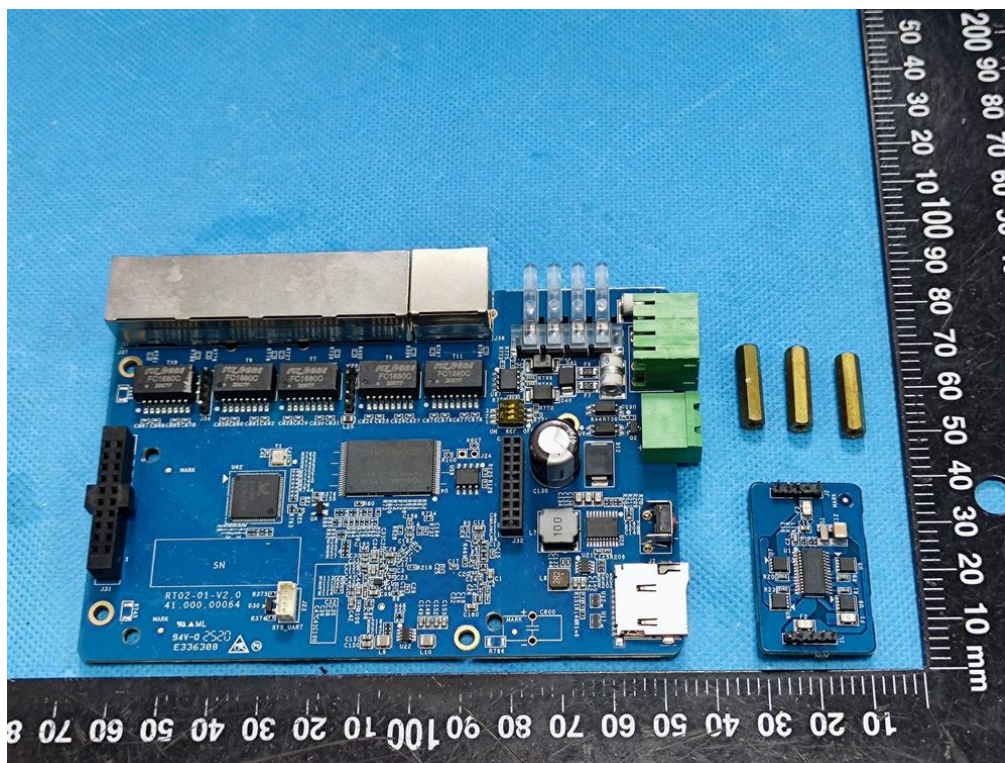
EUT- PCB view for model UR35-L04EU-G-P-W-485



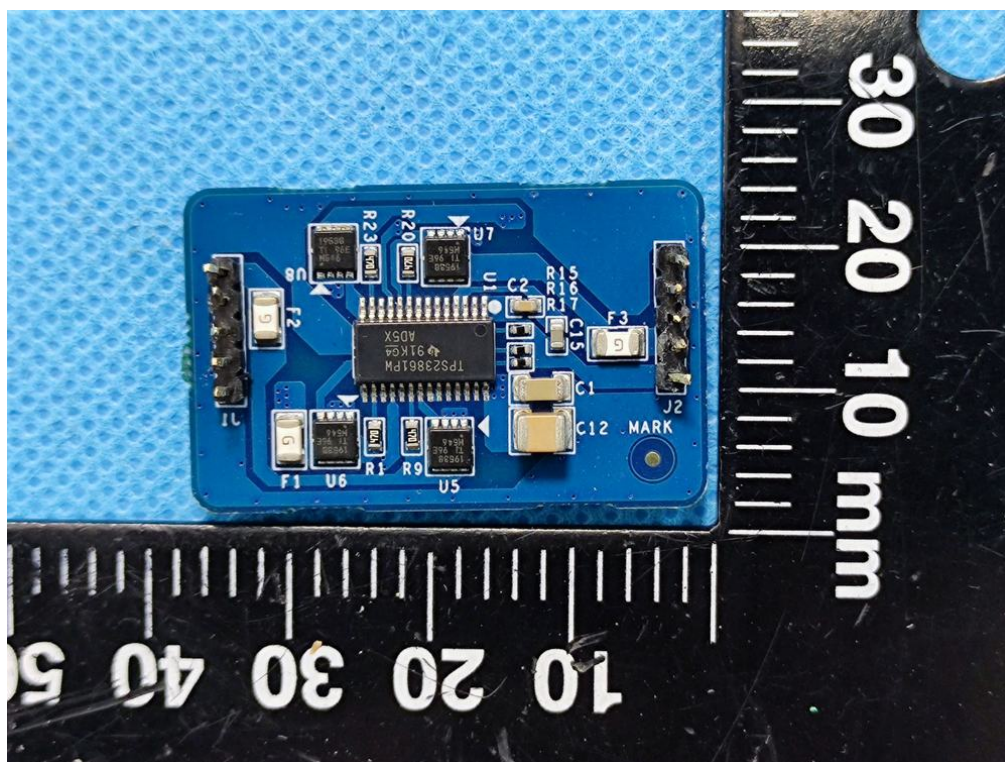
EUT- PCB view for model UR35-L04EU-G-P-W-485



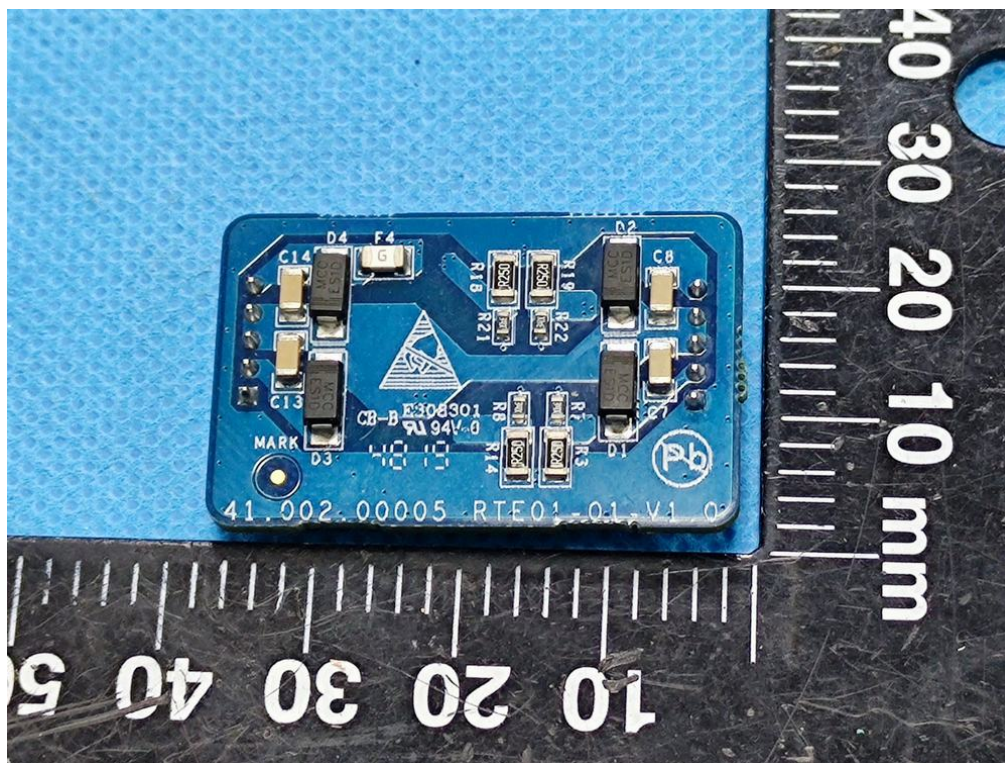
EUT- PCB view for model UR35-L04EU-G-P-W-485



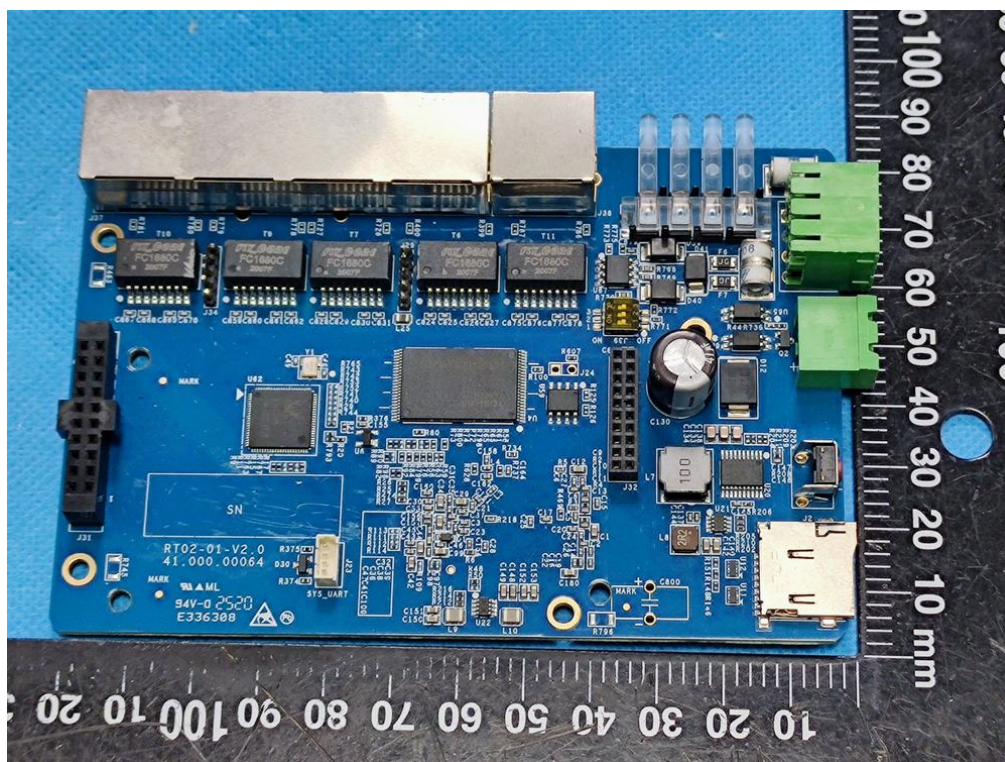
EUT- PCB view for model UR35-L04EU-G-P-W-485



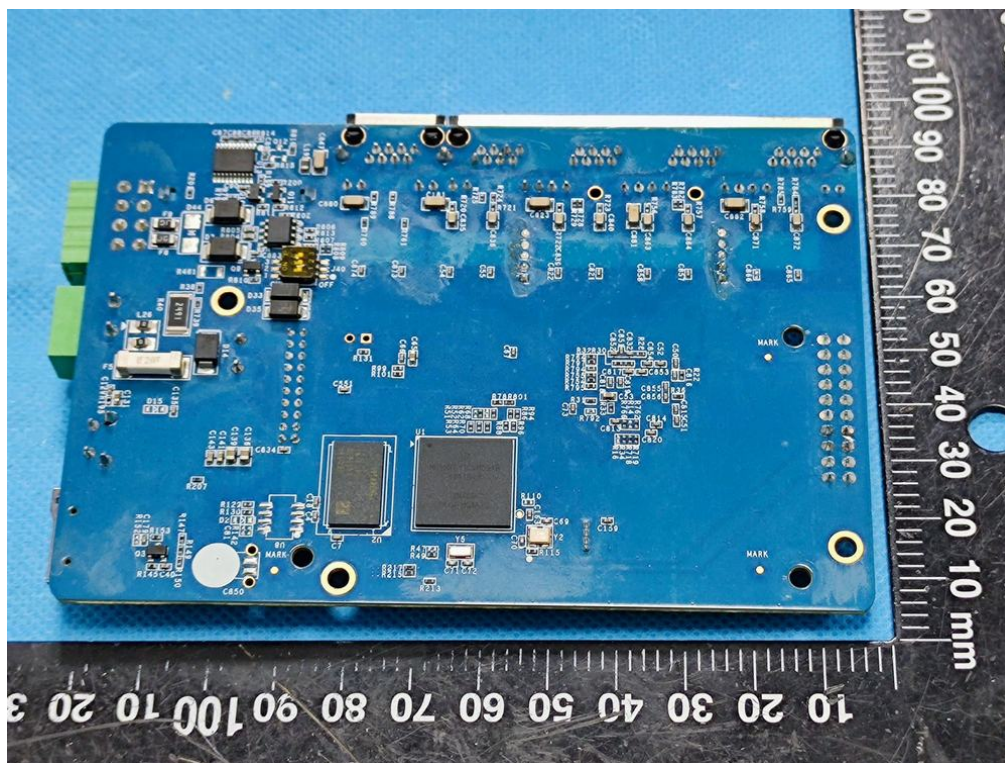
EUT- PCB view for model UR35-L04EU-G-P-W-485



EUT- PCB view for model UR35-L04EU-G-P-W-485



EUT- PCB view for model UR35-L04EU-G-P-W-485



EUT- Adapter view for model UR35-L04EU-G-P-W-485



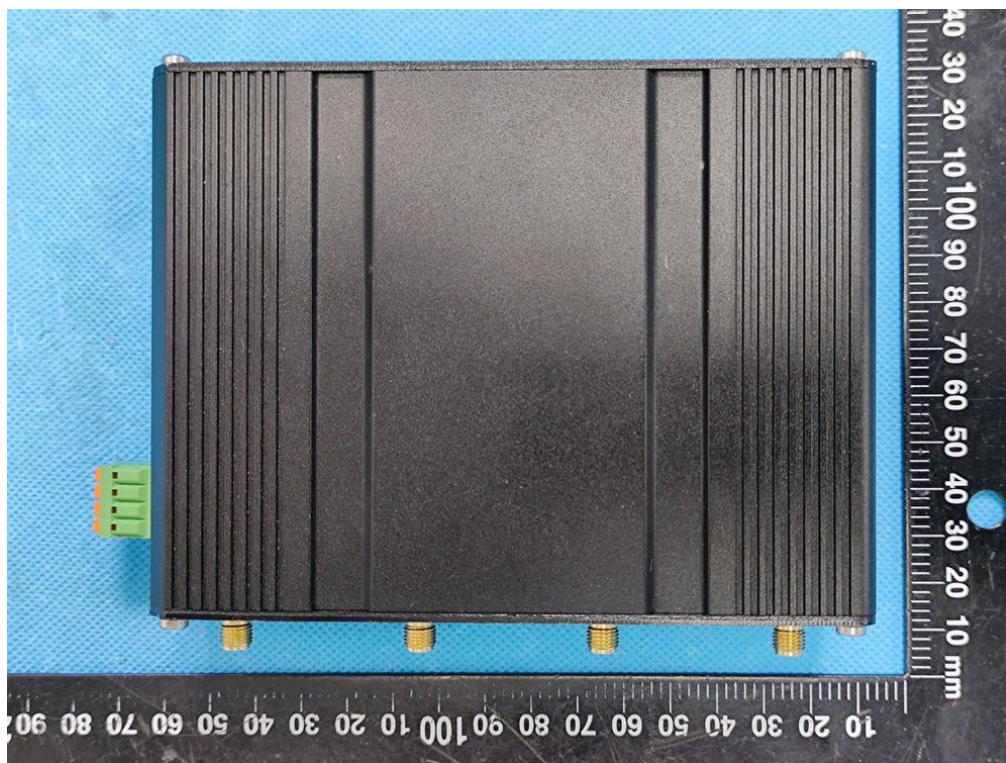
EUT- Adapter label view for model UR35-L04EU-G-P-W-485



EUT- All over view for model UR35-L04EU-G-P-W



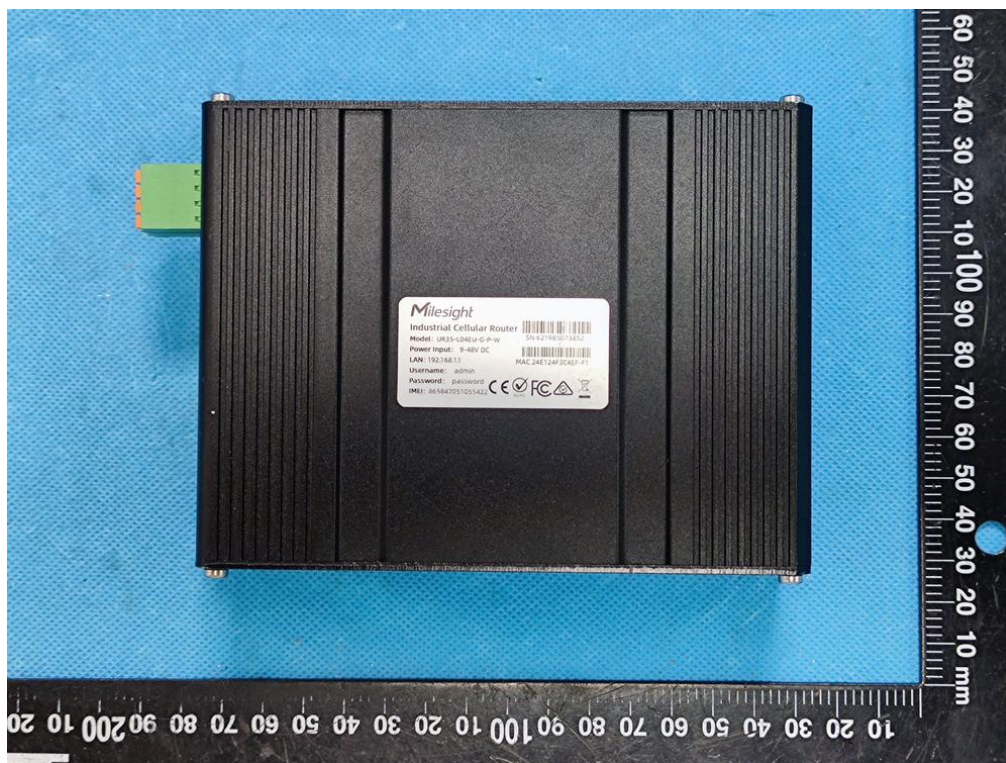
EUT- Top view for model UR35-L04EU-G-P-W



EUT- Side view for model UR35-L04EU-G-P-W



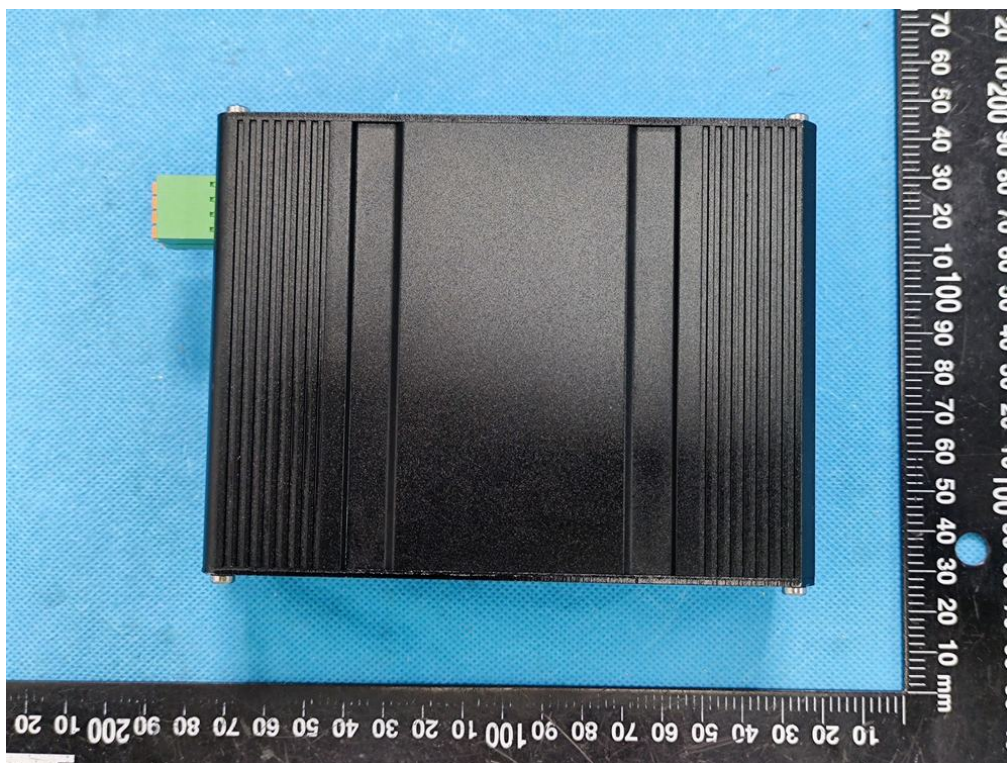
EUT- Bottom view for model UR35-L04EU-G-P-W



EUT- Label view for model UR35-L04EU-G-P-W



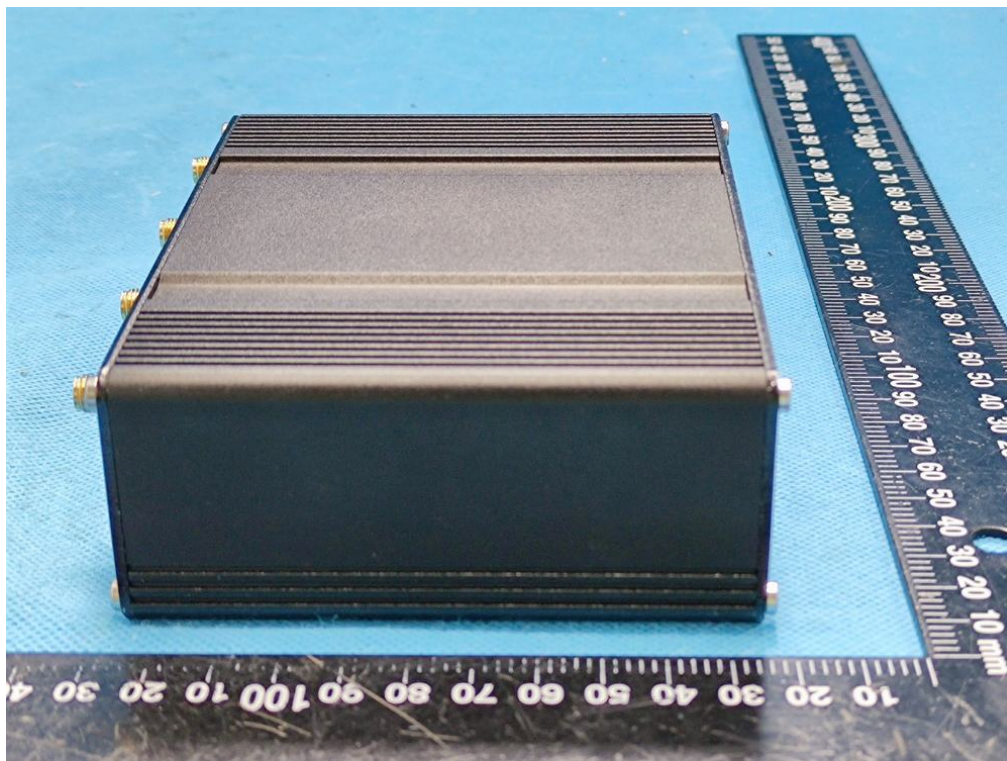
EUT- Bottom view for model UR35-L04EU-G-P-W



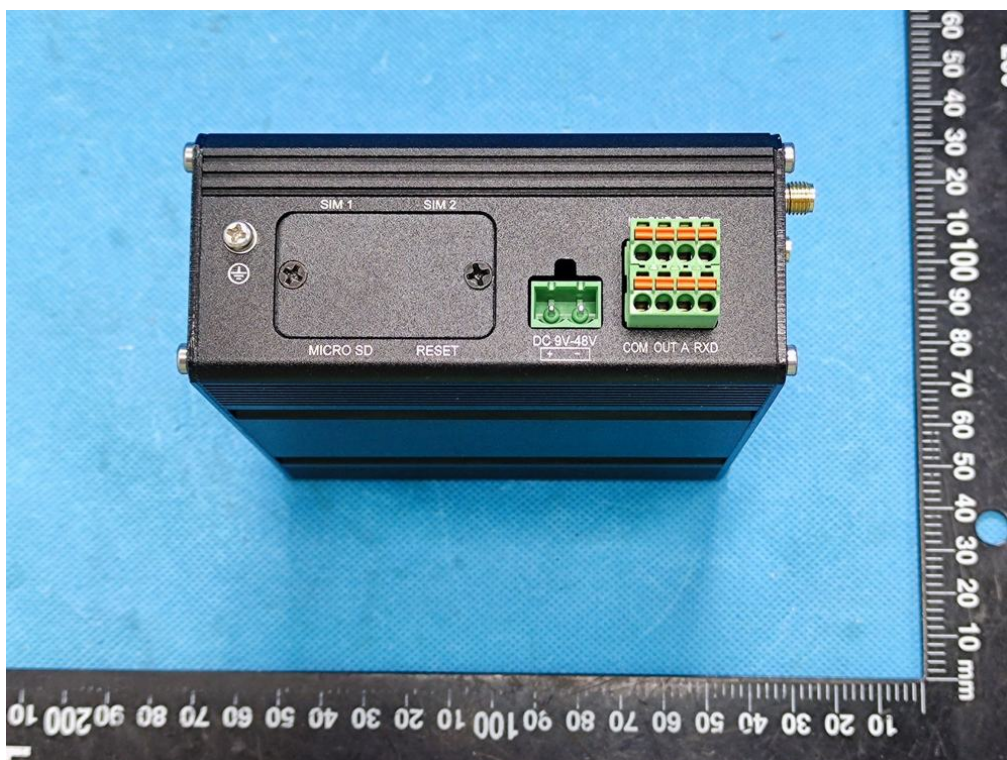
EUT- Side view for model UR35-L04EU-G-P-W



EUT- Side view for model UR35-L04EU-G-P-W



EUT- Side view for model UR35-L04EU-G-P-W



EUT- Port view for model UR35-L04EU-G-P-W



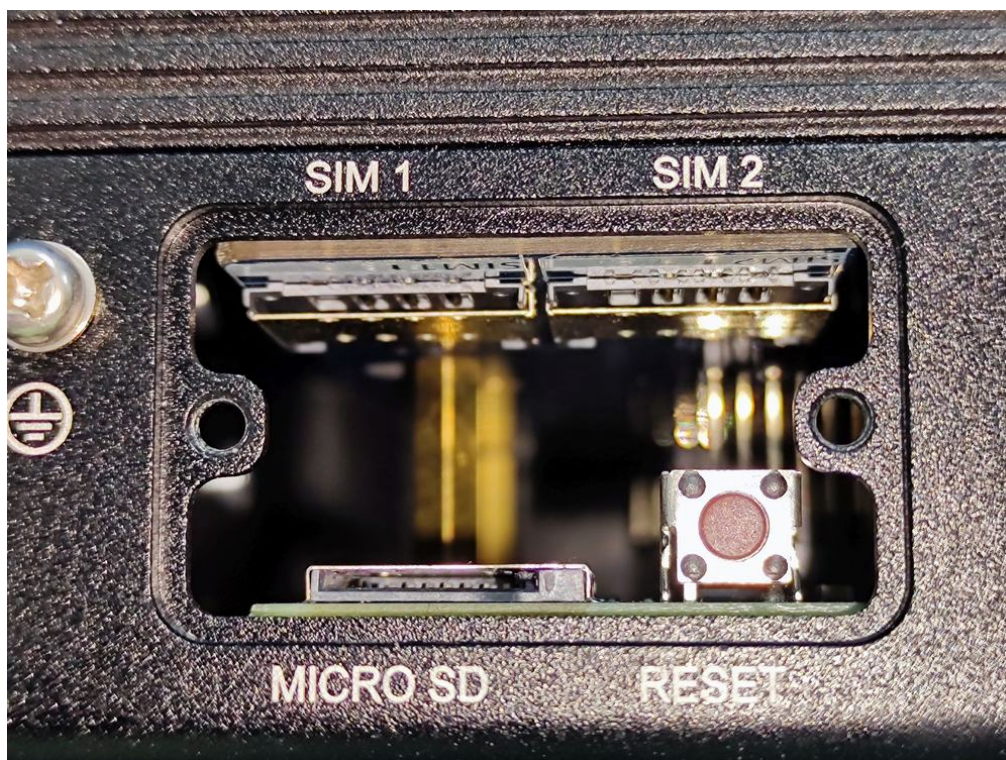
EUT- Port view for model UR35-L04EU-G-P-W



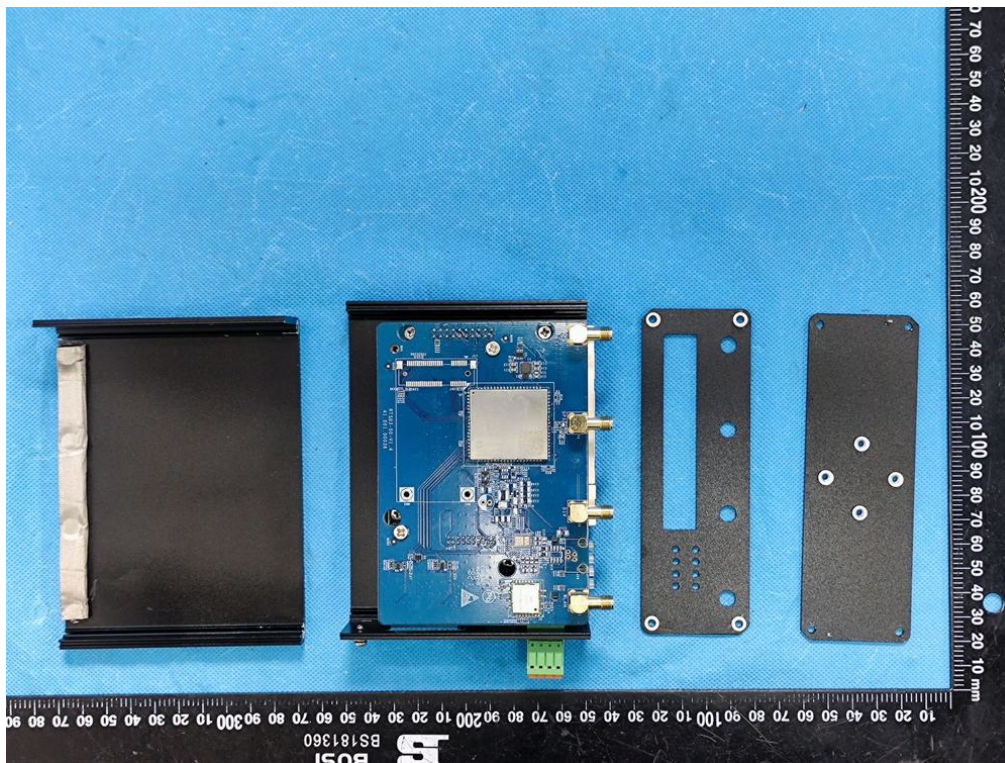
EUT- Uncover view for model UR35-L04EU-G-P-W



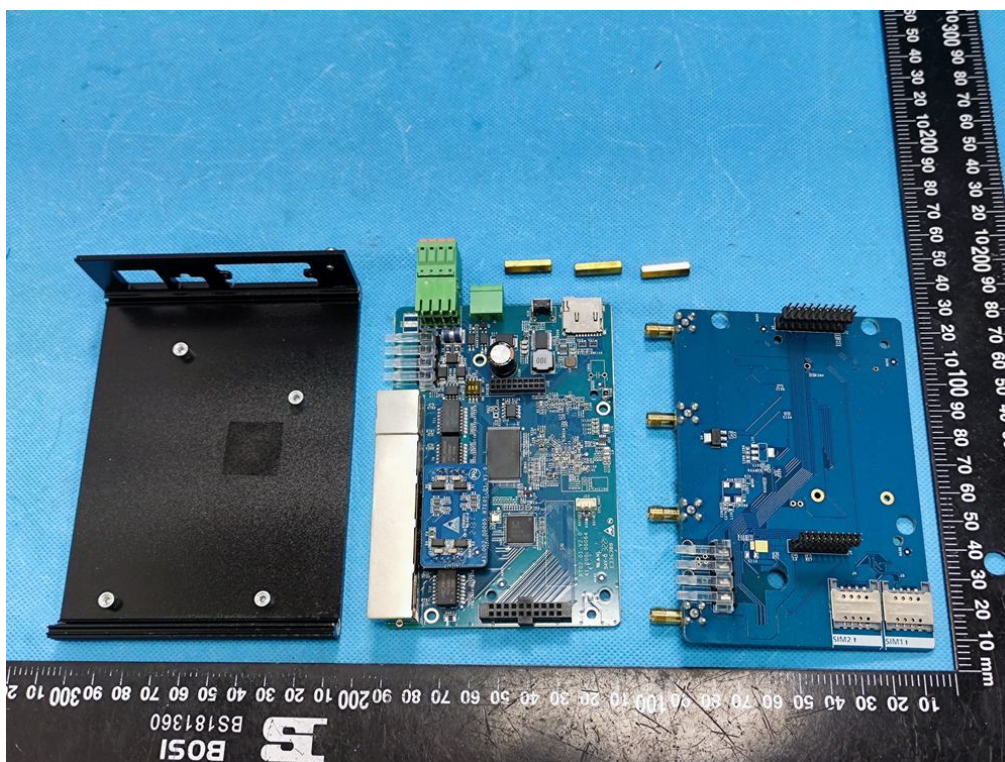
EUT- Uncover view for model UR35-L04EU-G-P-W



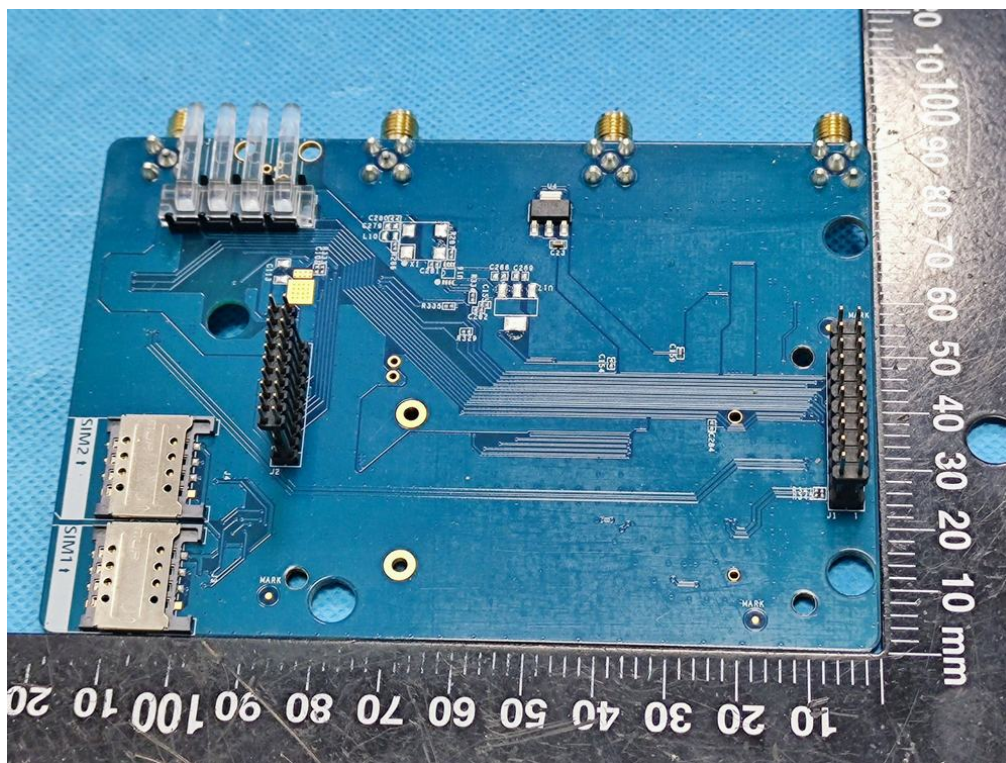
EUT- Uncover view for model UR35-L04EU-G-P-W



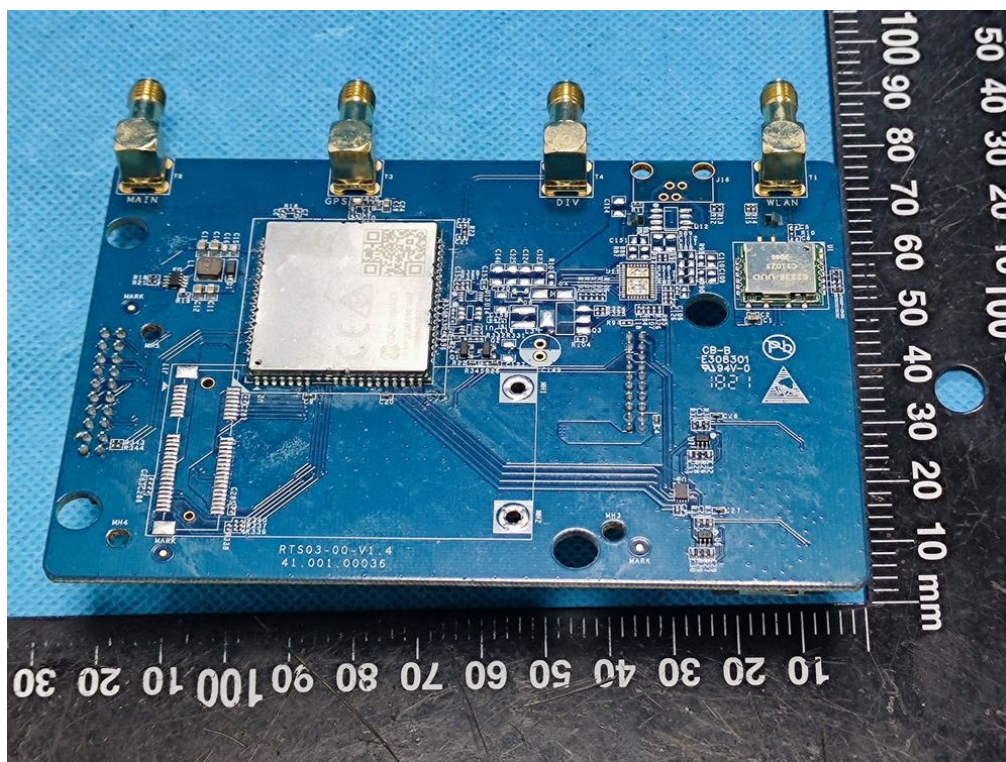
EUT- Uncover view for model UR35-L04EU-G-P-W



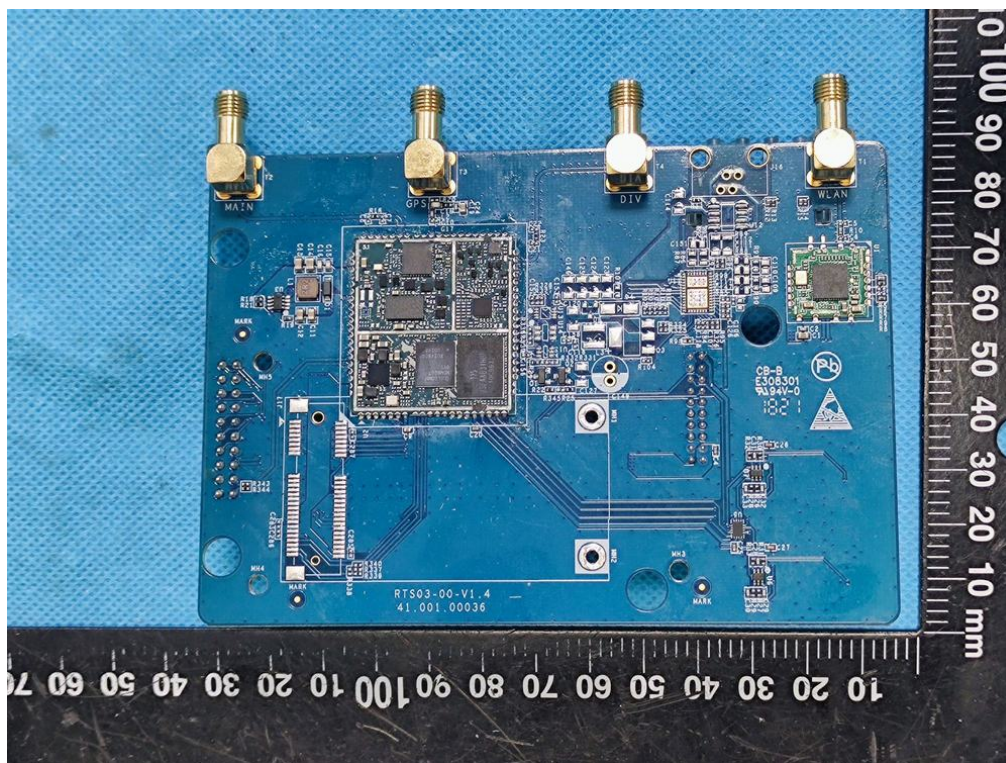
EUT- PCB view for model UR35-L04EU-G-P-W



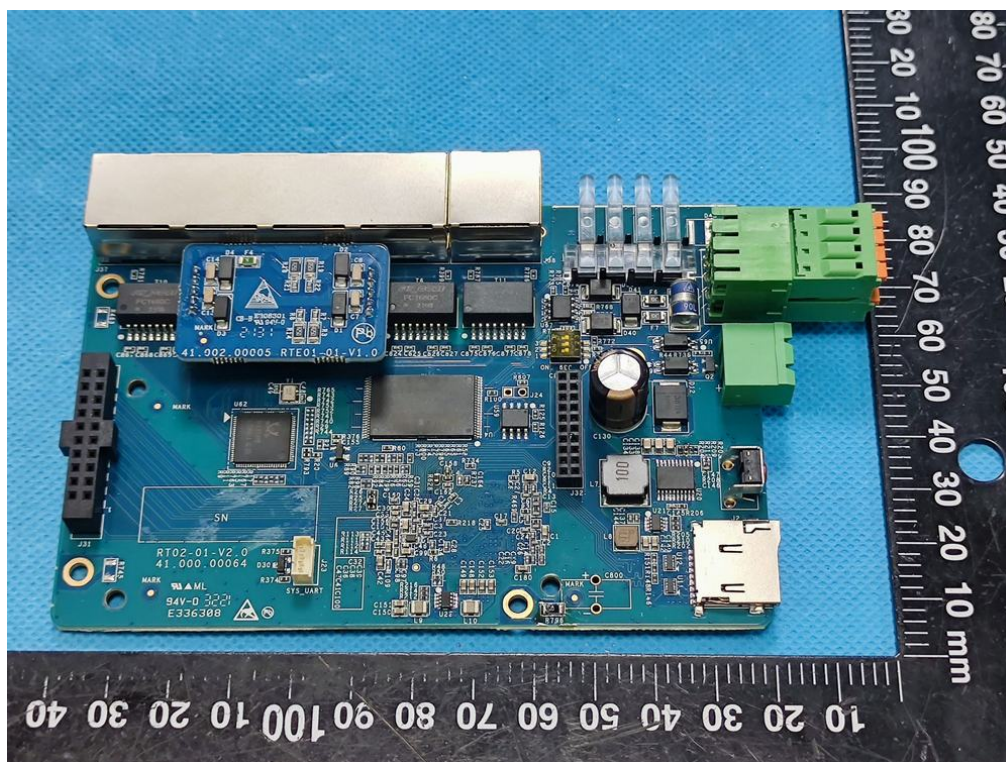
EUT- PCB view for model UR35-L04EU-G-P-W



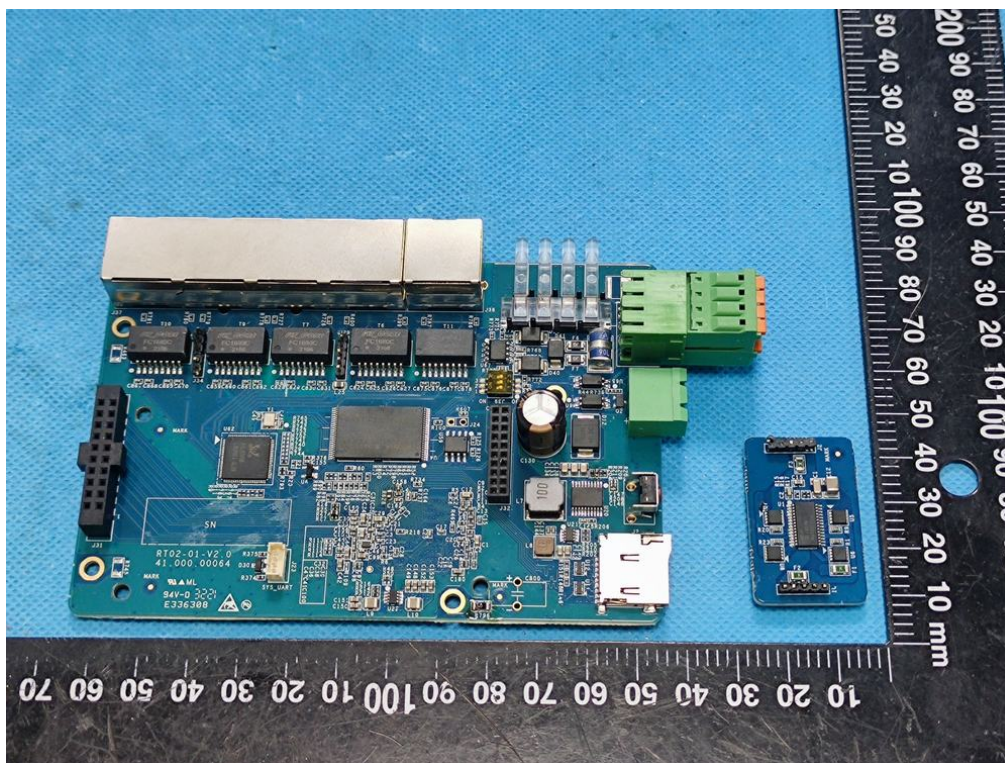
EUT- PCB view for model UR35-L04EU-G-P-W



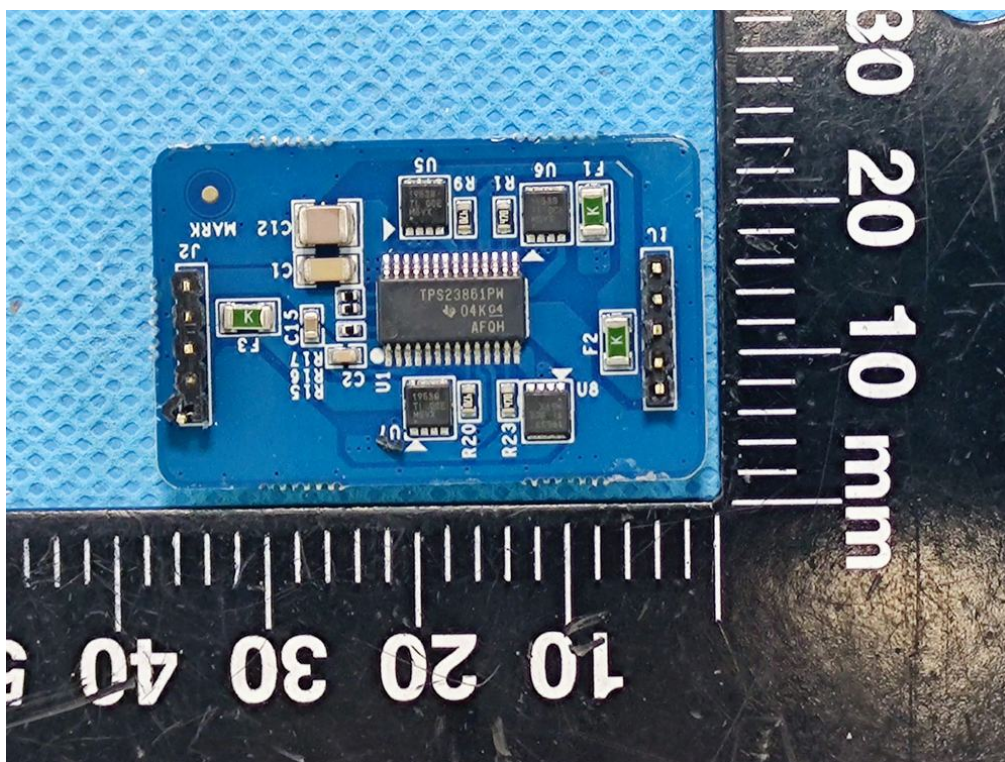
EUT- PCB view for model UR35-L04EU-G-P-W



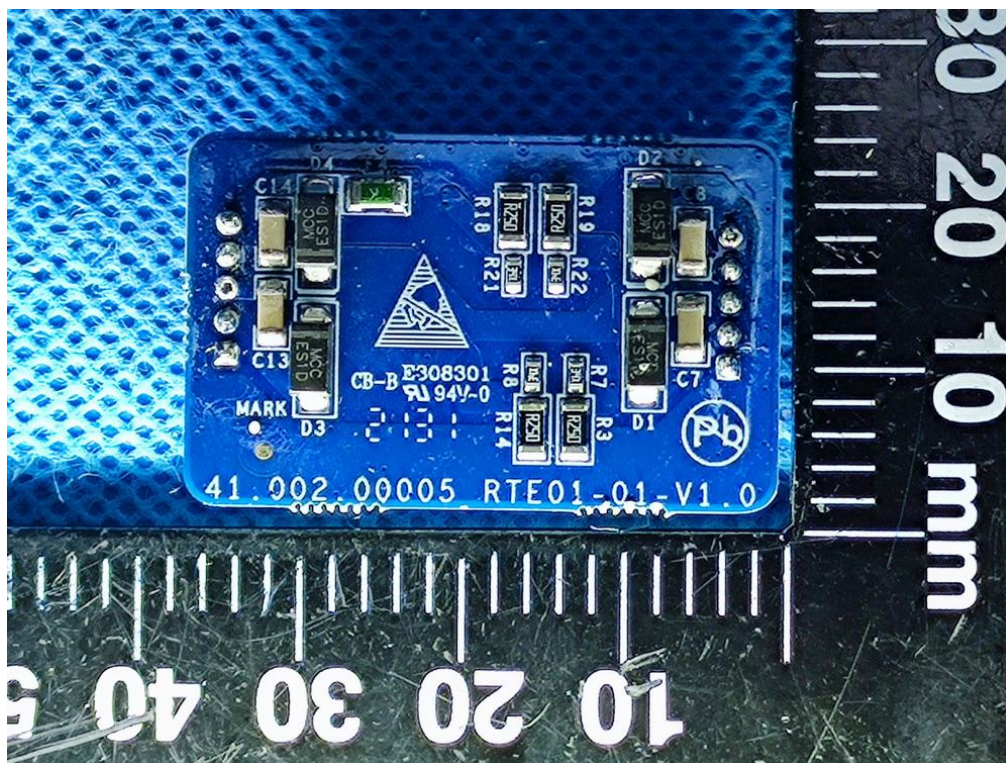
EUT- PCB view for model UR35-L04EU-G-P-W



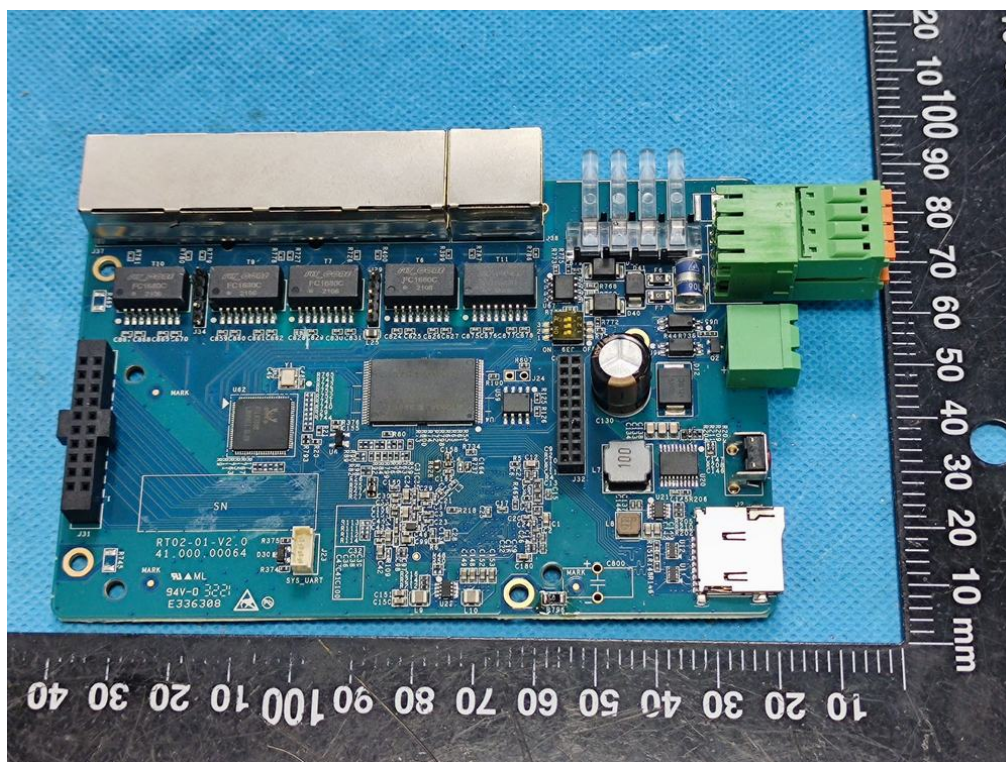
EUT- PCB view for model UR35-L04EU-G-P-W



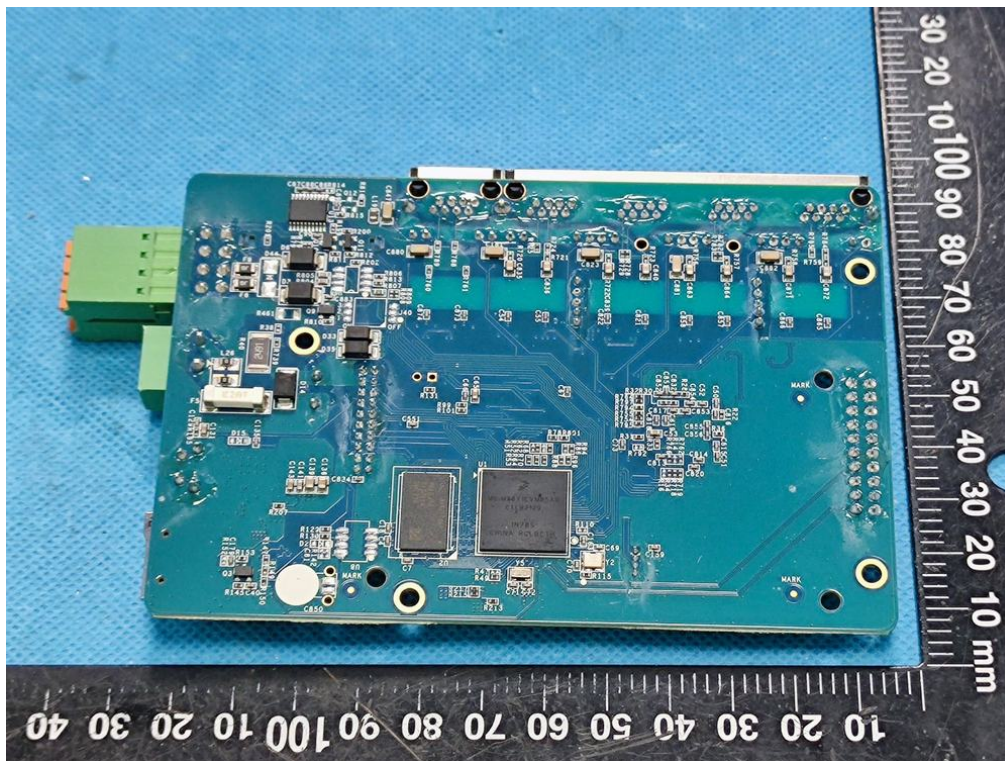
EUT- PCB view for model UR35-L04EU-G-P-W



EUT- PCB view for model UR35-L04EU-G-P-W



EUT- PCB view for model UR35-L04EU-G-P-W



EUT- Adapter view for model UR35-L04EU-G-P-W



EUT- Adapter label view for model UR35-L04EU-G-P-W



Appendix B – Directions

1. The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report.
2. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.
3. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.
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*****End of Report*****