**Testing resistance in the ODU cable**

Perform this task to test the resistances between the RJ45 pins at the PIDU end of the ODU cable.

Use the PTP drop cable tester (Figure 130) to make testing easier. This can be ordered from the support webpage (see Contacting Cambium Networks on page 2) by selecting **Order Cable Tester** and completing the order form.

The values printed on the PTP drop cable tester are example values and should only be used for guidance.

**Figure 130** Drop cable tester (front and back views)

**Figure 130** Drop cable tester (front and back views)

 

If PTP-SYNC is not installed, unplug the drop cable from the ODU port of the PIDU. If PTP-SYNC is installed, unplug the drop cable from the ODU OUT port of the PTP-SYNC unit. Connect the drop cable tester to the end of the drop cable. Then, perform the tests described in Table 122. Record the results in the Result column, if this is helpful.

|  |  |  |
| --- | --- | --- |
| **Table 122** RJ45 cable resistance tests at the PIDU end **Step**  | **Test**  | **Result**  |
| 1  | Measure the resistance between pins 1 and 2.  | Ohms  |
| 2  | Measure the resistance between pins 3 and 6.  | Ohms  |
| 3  | Measure the resistance between pins 4 and 5.  | Ohms  |
| 4  | Measure the resistance between pins 7 and 8.  | Ohms  |
| 5  | Ensure that all the results of steps 1 to 4 are within 10% of each other as follows: Take the minimum result and multiply by 1.1. If any of the remaining steps 1 to 4 results are greater than this, the test has failed.  | PASS or FAIL  |
| 6  | Measure the resistance between pins 1 and 3. Subtract 0.2 Ohms.  | Ohms  |
| 7  | Measure the resistance between pins 4 and 7. Subtract 0.8 Ohms.  | Ohms  |
| 8  | Compare the results of steps 1 to 4 and steps 6 to 7 to the maximum allowed, that is 20 Ohms. If any of the steps 1 to 6 results are greater than the maximum allowed, the test has failed.  | PASS or FAIL  |
| 9  | Measure the resistance between pin 1 and the screen (ODU ground). If it is less than 100K ohms (regardless of cable length), the test has failed.  | K Ohms PASS or FAIL  |
| 10  | Measure the resistance between pin 8 and the screen (ODU ground). If it is less than 100K ohms (regardless of cable length), the test has failed.  | K Ohms PASS or FAIL  |
| 11  | Measure the resistance between pin 1 and pin 8. If it is less than 100K Ohms (regardless of cable length), the test has failed.  | K Ohms PASS or FAIL  |