P1 Port Certifier Professional ver 2.0 P1C-003 v.2.0

Professional P1 port tester, certifier and protocol analyser.



Description:

The P1C-003 device is designed to certify and test the P1 ports of Smart Meters.

It enables automatic verification of key electrical P1 port parameters and checks correctness of the data packet.

Tests can be performed automatically and their results stored in the device's memory.

Separate PC application allows the printing of a Test Report from executed tests.

Key features:

The device precisely measures and 1 tests most of the electrical parameters of the P1 port

Precise "+5V line" voltage tests. (load, 2 ripple and noise level tests)

TC-006 Ripple leve	PASSED I	Result: 00
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-50		
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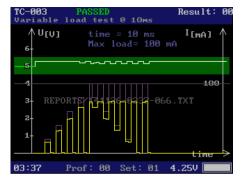
3

4

Precise "+5V line" current tests e.g., maximal current, shot circuit current, inrush current



Able to simulate various P1 load conditions





5 6

"Data Request Line" tests

- 7 Parses and checks the correctness of the P1 data protocol
- 8 10 different fully configurable "Profiles", with predefined settings for DSMR 2.2, DSMR 4.0 and ESMR 5.0



 9 10 different, fully configurable "Test sets" (up to 20 "Test cases" in one test set)



10 Can be connected as a mass storage device via USB

 External PC application for editing "Profiles" and "Test Suits" as well as Test Report generation

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12 Configurable "Test Reports" in .pdf format

Test report generated by "P1 port certification device"	6. TC details and graphs
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1). Document description	TC-N1 Voltage under load livet
This document prevents the test results executed by 'P1 Certifier device'.	The intendion of TC-001 is to sheek contractness of overload protection
The document is divided in number of sections.	mentarism. During the test, vistage on the "vity tine" is measured at continuousy increasing load.
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3). Test case set used during the test	No 101 Poilso Recoll 00 Recolling and a feet
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6 Nose level at idle load 10 Data packet receptor	1000
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3 PASSED Variable load @ 10ms Testcase executed correctly. No errors found.	
4 PASSED Variable cod di 120ms Testuale executed corrects. No errora found	Rest - PASSED
5 FAILED Variate load do to Minimal atorest votage exceeded	Reason - Testoase executed correctly. No errors found.
6 PASSED Nose ever al de cad Testoase executed conectly. No errors found.	
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- **13** Clear OLED display
- **14** Hi-capacity rechargeable LiPo battery on board (8 hours of work time without recharging)
- **15** Sound feedback
- **16** HW calibration port and SW calibration registers
- **17** Tested with all major smart meters available on the Dutch market