

Accessory device to a taximeter

Issued to

TP Radio

Agenavej 37, DK-2670 Greve, Denmark

Type of accessory and intended use

Printer designated PR1024S, and accompanied software, intended to generate the print-outs required from STAFS 2012:5. The printer shall be used together with taximeter designated TP Radio type Au2Tax covered by EU Type Examination Certificate No. 0402-MID-SC0970-11 issue 9 dated 2022-03-07 issued in accordance with directive 2014/32/EU.

In accordance with

The Swedish Act on Metrology and Verification STAFS 2012:5 (updated in accordance with STAFS 2016:15).

Certificate

RISE Research Institutes of Sweden AB hereby certify that the product described above fulfils the requirements stated in STAFS 2012:5 (updated in accordance with STAFS 2016:15). The certification is verified by assessment according to the procedure described in STAFS 2012:5, which includes type testing and surveillance of the factory production control. Rise Certification Rule SPCR 179 issue 2019-03-28 has been applied.

Rated operating conditions

Mechanic environment class:	M3 according to directive 2014/32/EU
Electromagnetic environment class:	E3 according to directive 2014/32/EU
Climatic environment:	-25 to +55 °C, Condensing, closed (installed in a car)

The principal characteristics and approval conditions are set out in the appendix hereto, which forms part of the approval document. All the plans, schematic diagrams and documentations are recorded under reference file P112538.

Originally issued: 2016-04-08

Expiry date: 2032-03-07

This certificate replaces earlier issues.

Martin Tillander

Certificate SC0736-15 | issue 3 | 2022-03-07

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P112538

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Specifications:

1 Design of the instrument

1.1 Construction

Product names

Printer PR1024S (printer part)

Supply voltage

Printer: 9-16 V



Picture 1: Printer PR1024S

1.2 Software

The validation of software was based on the essential requirements given in STAFS 2012:5.

Software version

The following program versions are approved:

Designation	Program version	Checksum
MID	SE_1.1.1	E0C9A2A3
	SE_1.1.2	66A47CB7
	SE_1.1.3	7CB9ED28
STAFS	1.11 ESC/POS	577BB795

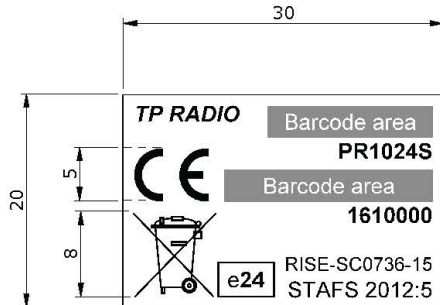
The software identification number and the checksums for MID software and STAFS software can be seen on the shift report, taximeter control and adaptation control

2 Labelling and inscriptions

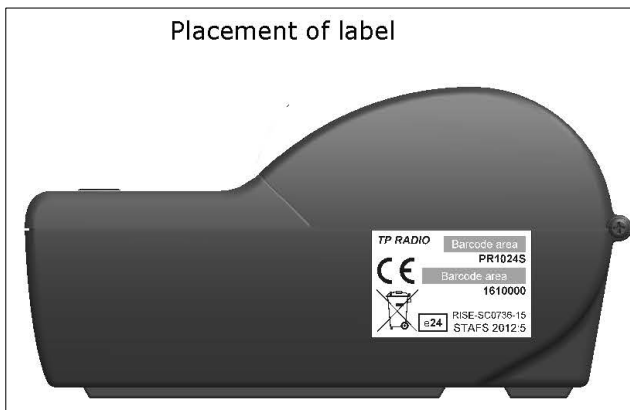
2.1 Information to be borne by the instrument

The marking on the accessory shall contain the following information:

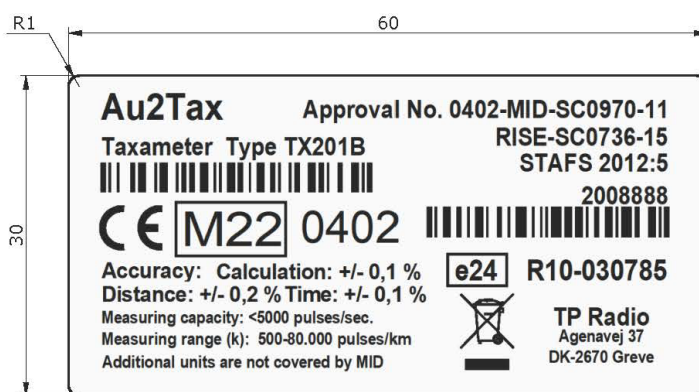
- the name of the manufacturer
- the serial number
- the designation or type name (according to "Product names" above)
- the certificate number
- the national Swedish marking STAFS 2012:5



Picture 2: Marking plate and Designation marking for the printer PR1024S



Picture 3: Placement of the marking plate



Picture 4: Marking plate of the taximeter systems CPU TX201B with reference to STAFS 2012:5 and certificate. The STAFS 2012:5 software are stored in the taximeter system CPU TX201B.

2.2 Further inscriptions, if necessary

Further inscriptions can be necessary, e.g. to show conformity with other Directives and/or Regulations.

3 User's manual

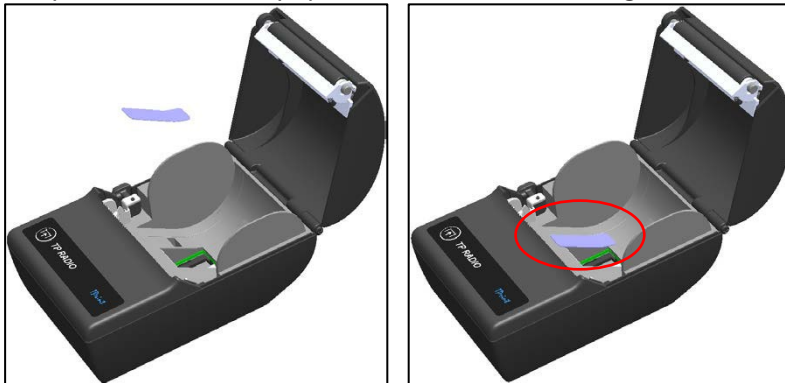
User's manual intended to show how the different parts required by STAFS 2012:5 is to be shown had the title:

Program version	Title of manual	Document version	Dated	Language of examined version
SE_1.1.1	User Manual for Au2Tax Taxi Meters	SW ver. 1.1.1	07/12 2015	English
SE_1.1.2	User Manual for Au2Tax_SE Taxi Meters	SW ver. 1.1.2	06/02 2017	English
SE_1.1.3	User Manual for Au2Tax_SE Taxi Meters	SW ver.1.1.3	18/02/2022	English

4. Security measures

4.1 Sealing

The printer PR1024S is physical sealed with a shielding label (10x30mm).



Picture 5 and 6: Physical sealing of printer PR1024S with a shielding label.

4.2 Data logger

The printer PR1024S is a non-intelligent device. This printer software does not do any calculations on the data for the receipt but just take care of the printing process. The legally relevant software is stored in the taximeter CPU TX201B and are protected by a physical and electronic seal. All data is stored in the taximeter CPU TX201B together with a 32-bit CRC checksum.

For the data log, see taximeter system certificate O402-MID- SC0970-11.

5 Applied environmental testing

Vibration

IEC 60068-2-64 (OIML R21, Annex A clause A.5.4.4):

Total frequency range	10-150 Hz
Total RMS level	7 m/s ²
ASD level 10-20 Hz	1 m ² /s ³
ASD level 20-150 Hz	-3 dB/octave

Testing was carried out in three mutually perpendicular axes for 0.5 hours in each direction and the taximeter was connected to power during testing.

Dry Heat

IEC 60068-2-2 (OIML R21, Annex A clause A.5.4.1), with a duration of 16h at the highest temperature, +55°C. Functional control was carried out at +55°C. The test object was connected to power during the test.

Cold

IEC 60068-2-2 (OIML R21, Annex A clause A.5.4.1), with a duration of 16h at the lowest temperature, -25°C. The test object was disconnected from power during the cold test. The test object was powered at the end of the cold test for the functional testing.

Cyclic damp heat

Two cycles of damp heat was carried out according to IEC 60068-2-30 (OIML R21, Annex A.5.4.2) temperature: +55 °C. The test object was disconnected from power during the damp heat test. The test object was powered at the end of the damp heat test for the functional testing.

Emission

EN 55022:2006, /A1:2007 class B

Immunity

OIML R21 A.5.4.5.1 Radiated RF immunity according to IEC61000-4-3, 24 V/m

OIML R21 A.5.4.5.2 Injected RF immunity according to IEC61000-4-6, 24 V

OIML R21 A.5.4.6 Electrostatic discharged according to IEC61000-4-2, 6 kV CD/8 kV AD

OIML R21 A.5.4.7.1 Automotive voltage transient immunity according to ISO 7637-2, level 4, pulses 1, 2a, 2b, 3a and 3b

OIML R21 A.5.4.7.2 Automotive voltage transient immunity ISO 7637-3, level 4, pulses 3a and 3b

Starting profile. Level III according to ISO 16750-2:2021 (E)

Load dump, Test B according to ISO 16750-2:2021 (E)

6 Traceability of reports concerning type examination

Type examination reports

Report	Title	Date
5P06802-TS_rev.2	Type examination of accessory device to a taximeter	2016-01-27

Supplementary type examination reports concerning changes

Report	Description of change	Date
5P06802-01	Evaluation of Taximeter Software	2015-11-13
5P07203-01	EMC test on Taximeter system Au2Tax (TX201 and DI801) with accessory device (PR1024)	2016-01-04
5P07203-03	EMC test of taximeter system Au2Tax	2016-01-26
7P01234-TS	Supplementary type examination of accessory device to a taximeter	2017-04-11
P112538.DP01.A02	Examination of accessory device to taximeter system AU2Tax according to STAFS 2012:5	2022-03-01