OIML CERTIFICATE OF CONFORMITY

Issuing authority:	**National Measurement Office**
Person responsible:	**Paul Dixon – Certification Services Director**
Applicant:	**ITALTAX SRL** **Via dell'Industria, 16** **62017 Porto Recanati (MC)** **Italy**
Manufacturer:	**The applicant**
Identification of the certified pattern:	**X-One Plus**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

OIML R21 - Edition 2007(E)

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

The conformity was established by tests described in the associated pattern evaluation report P01382 which includes 14 pages.

Issue Date: **11 December 2014**
Reference No: **TS16/0010**

Signatory: P R Dixon

Characteristics of the instrument:

Characteristics:

The pattern is a taximeter designated the X-One Plus designed to be installed in a road vehicle for the calculation of fares. The fares are calculated based on measurement of distance and time; the instrument operates in calculation modes S (single application of tariff) or D (double application of tariff). The instrument is powered via the vehicle battery.

The distance measuring device (transducer) is not covered by this certificate.

Main features:

The instrument comprises a PCB housed within a plastic enclosure, one LED displays and push buttons allowing user operation.

The plastic enclosure consists of front and rear parts held together with screws, with removable parts on the right and on the left-hand sides preventing access to the PCB, communication ports and test connector.

The display uses Windows CE operating system and comprises two distinct areas: one legally relevant area for the taximeter application, one non-legally relevant area for additional user applications. The taximeter area cannot be obscured by non-legally relevant information.

The legally relevant area of the display may be set to various positions (and colours).

Devices:

- Display check
- Calculation modes S or D
- Fare calculation (initial fare, fare increments, extras)
- Segregated display (legally relevant for taximeter application, non-legally relevant for additional user applications)
- Display of rate, mode (For Hire, Hired, Stopped) and fare (actual fare and total fare with extras)
- Display of distance and time for the journey
- Loading of tariffs and software (via sealed interface)
- Real time clock
- Long-term totalisers (non-resettable)
- Display of parameters, software and tariff information (read-only)
- Test connector

Interfaces:

- RS232
- Passenger Sensor input
- External Lights Input
- External Lights Power Output
- Odometer input
- Optional CAN Bus input
- Test Connector
- Service/programming keys

Technical data:

Power supply	9 to 32 VDC (12 or 24 V nominal)
Taximeter constant k	500 to 65,535 pulses/km
Maximum speed	200 km/h
Pulse voltage amplitude (low/high)	0 - 0.3 VDC / 5 -12 V DC
Pulse frequency	≤ 1 kHz
Minimum pulse width	50 µs
Electromagnetic environment	E3
Mechanical environment	M3
Climatic environment	-25°C to +70 °C
	Non-condensing (closed)

Firmware:

The legally relevant software is held in the firmware and is unambiguously identified by its release name and CRC-16 checksum value.

The firmware release name and CRC versions programmed in the taximeter can be displayed as follows:

- From For Hire Position press at the same time F3+F4+F5
- Wait few seconds
- In the left display will be shown the CRC Firmware number
- In the right display will be shown the Country identification with 3 letters and 2 numbers.

The software identification shall be as follows:

Software release name	CRC (checksum value)	Country / Language
XPG01	13879	Generic / Programmable

Software download is only possible via the Service programming key, which is protected by the mechanical seal described in the Sealing measures section.

Tariff:

The tariff is protected by a CRC-16 checksum, the value for the tariff checksum can be displayed as follows:

- From For Hire Position press at the same time F2+F5
- The display will start showing the numbers from 0 to 9 then STOP
- The left display will then show the tariff checksum and the right display will show the Country identification with 3 letters and 2 numbers.

Sealing measures:

The taximeter is fitted with five sealing points preventing access to the metrological components and parameters.

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R21/2007-GB1-14.03	11 December 2014	Certificate first issued
-	-	No revisions have been issued.