

Member State of OIML
United Kingdom of Great Britain
and Northern Ireland

OIML Certificate No
R21/2007-GB1-16.05

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**
Person responsible: **Max Linnemann – Head of Certification Body**
Applicant: **ITALTAX SRL**
Via dell'Industria, 16
62017 Porto Recanati (MC)
Italy
Manufacturer: **The applicant**
Identification of the certified pattern: **F3 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 R 21 - 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 testing and examinations described in the associated Evaluation Report P01993 which includes 15 pages.

Issue Date: 24 November 2016
Reference No: TS16/0012



Marek Bokota
Technical Manager
For and on behalf of the Head of Certification Body

NMO | Stanton Avenue | Teddington | TW11 0JZ | United Kingdom
Tel +44 (0) 20 8943 7272 | Fax +44 (0) 20 8943 7270 | Web www.gov.uk/government/organisations/regulatory-delivery
NMO is part of the Regulatory Delivery directorate within the Department for Business, Energy and Industrial Strategy



0135

Characteristics of the instrument:

Characteristics:

The pattern is a taximeter designated the F3 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, five push buttons, two LED displays, and an integrated printer.

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

Devices:

- Display check
- Calculation modes S or D
- Fare calculation (initial fare, fare increments, extras)
- 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
- Embedded Printer
- Embedded Fiscal Memory

Interfaces:

- 2 x RS232
- Passenger Sensor
- External Lights Input
- Odometer Input
- External Lights power output
- Magnetic Card reader
- Dallas 1-Wire Net
- Optional CAN Bus input
- Optional Bluetooth module
- Optional GPS module
- Optional 3G module
- Optional SD card
- Optional accelerometer module
- Test Connector
- Service/Programming Keys

Technical data:

Power supply	9 to 16 VDC (12 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 K2+K3+K4
- 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
nnl 02 or nnl 03	58891 61692	Generic English
ITA03 or ITA04	59149 63647	Italy
OLA01 OLA02	7437 17841	The Netherlands
ESP05 or ESP06	28740 32943	Spain
GER01 GER02	49041 51967	Germany
BEL02 or BEL03	30883 36425	Belgium
POR01 or POR02	4717 23750	Portugal
ENG01 or ENG02	41906 62333	U.K.
FRA01 or FRA02	33132 48932	France
AUS01 or AUS02	35770 54951	Austria

Software release name	CRC (checksum value)	Country / Language
NOR02 or NOR03	65231 13123	Norway
GRE03 or GRE04	15296 32541	Greece
RCE01 or RCE02	47576 55214	Czech
SVF07	36258	Switzerland / French
SVT07	24678	Switzerland / German
SVI07	18934	Switzerland / Italian
SLO01	26798	Slovakia

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 checksum value can be displayed on the taximeter by pressing K1+K4 keys in For Hire status: the taximeter will start the display self-check procedure and at the end will show the tariff CRC in its main display and the firmware name in the secondary display.

Sealing measures:

The taximeter is fitted with sealing points preventing access to the metrological components and sealing the instrument to the car.

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R21/2007-GB1-16.05	24 November 2016	Certificate first issued.
-	-	No revisions have been issued.