

Issued by NMI Certin B.V.  
Hugo de Grootplein 1  
3314 EG Dordrecht  
The Netherlands

In accordance with The Council Directive 2009/23/EC on non-automatic weighing instruments.

Manufacturer Xiamen Pinnacle Electrical Co Ltd.  
4F Chambridge Building  
Torch High-Zone Xiamen  
Fujian 361006  
China

In respect of A class **(III)**, electronic, multi-interval, **non-automatic weighing instrument**,  
intended to be used for direct sales to the public.  
Manufacturer mark/name: Xiamen Pinnacle Electrical Co. Ltd. or  
Pinnacle Technologies Co. Ltd.  
Type : TL-615 for brand names Telestar, Elemis and Farex;  
ESP-615 for brand name Aclas.

Characteristics Max = 15 kg  
e ≥ 2 g  
n ≤ 3000 divisions (per partial weighing range)  
maximum of two partial weighing ranges  
Temperature range 0 °C / +40 °C  
In the description number T6786 revision 1 further characteristics are described.

Valid until 7 July 2015

Description and documentation The instrument is described in the description number T6786 revision 1 and  
documented in the documentation folder T6786-1, appertaining to this  
EC type-approval certificate.

Remarks This revision EC type-approval certificate replaces the earlier versions, except for its  
documentation folder.

The Notified Body no. 0122  
NMI Certin, 10 September 2010



C. Oosterman  
Head Certification Board



# Description

Number **T6786** revision 1  
Project number 10200612  
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## 1 General information about the non-automatic weighing instrument

All properties of the non-automatic weighing instrument, whether mentioned or not, may not be in conflict with the legislation.

### 1.1 Essential parts

See drawing "System Diagram", drawing number 1;  
The electronics;  
The mechanical assembly with load cell.

EMC protection measures:

- The A/D part situated on the main board is shielded in a metal case;
- A ferrite bead on the cable from the load cell to the A/D converter (2 turns);
- Two ferrite beads on the cable from the display to the main board (1 turn).

### 1.2 Essential characteristics

Power supply: 220 V AC, 50 Hz or 6 V DC from a rechargeable battery.

### 1.3 Essential shapes

The non-automatic weighing instrument is built according to drawing:

- Exploded view, drawing number 2.

The data plate is secured against removal by sealing or will be destroyed when removed.

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the drawing "Drawing against dismantling", drawing number 3.

Inside the cabinet is a calibration lock, located on the main board.

### 1.4 Conditional parts

The non-automatic weighing instrument may be equipped with peripheral equipment which is used for the applications listed in article 1(2)(a) of Directive 2009/23/EC, if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC.

The non-automatic weighing instrument may be equipped with an Electronic Point of Sale (EPOS) or an Electronic Cash Register (ECR), if these EPOS and ECR are certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC.

The non-automatic weighing instrument may be equipped with Electronic Funds Transfer equipment (EFT/ECU), if these EFT/ECU represent only the price total on the display.

The non-automatic weighing instrument is fitted with a leveling device and a level indicator, unless the instrument is installed in a fixed position. The level indicator has a black ring that indicates the maximum tilt.

## 1.5 Non-essential parts

The non-automatic weighing instrument may be connected to non-essential devices, for example but not limited to bar code readers, foot switches, second display's and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of Directive 2009/23/EC unless the "preliminary observations" in Annex 1 of this directive is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this type-approval document.

Battery;

External power supply.

## 2 Information about the main constituent parts of the non-automatic weighing instrument

### 2.1 The electronics

#### 2.1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Main board & AD Converter	4	-	Layout
Parts list for main board	5	-	Parts list (2 pages)

#### 2.1.2 Essential characteristics

List of devices:

- Zero indicator;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Gravity compensation;
- Calibration mode via a jumper setting on the main board;
- Acting upon significant faults;
- Checking the display;
- Price calculation;
- Weighing unstable samples.
- When equipped with a printer the following devices may be present:
  - Indications other than primary indications;
  - Memory storage;
  - Non-weighed articles;
  - Totalization;
  - PLU function.



### 2.1.3 Conditional parts

The interface section is located on the main board. The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:

- RS232C;

### 2.1.4 Non-essential parts

Display;  
 Keyboard;

## 2.2 The mechanical assembly with load cell

### 2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Model: L6D Load cell	6	-	Drawing and specification sheet

### 2.2.2 Essential characteristics

$e_1 \geq E_{max}/10000$  in case of multi-interval instrument;  
 Excitation power supply 5 V DC.

## 3 Approval conditions

See chapter 1.3, essential shapes.

## 4 Seals and verification marks

See chapter 1.3, essential shapes.

## 5 CE-mark of conformity and inscriptions

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfill the requirements of article 1 of Annex IV of Directive 2009/23/EC.