

CPWE Enterprise Microcontroller/Weight Indicator for Industrial Automation



As of: Friday, January 23,
2026



Standard Features

- Waterproof 25-key numerical functional keyboard, which allows to easily enter the target, alphanumeric texts, codes, etc.;
- Programmable function keys, for customising the keyboard functions according to the needs.
- Easy to consult backlit graphic LCD display, with a clear visualisation of the weight and of the automation status; selection of the language from the menu.
- Anodised aluminium case according to DIN norms, with dimensions of 202x105x147.7mm; 187x90mm template for panel board mounting.
- IP65 front panel protection, against dust and water sprays.
- Real time clock and permanent data memory.

- Integrated alibi memory for CE-M communication with PC and printer.
- Calibration and Set-Up parameters, configurable from PC with Dinitools or with the keyboard; theoretical calibration with the entry of the characteristics of the load cells.
- Up to 1.000.000d displayable for internal factory use.
- Up to 10.000e or multirange 3 x 3000e @ 0,3 $\mu\text{V/e}$ in approved version for CE-M legal for trade use.
- Up to 8 signal linearisation points with DINITOOLS.
- Internal resolution of up to 3.000.000 points.
- A/D 24 bit sigma-delta 4-channel conversion, up to 3200 conv./sec. with automatic selection.
- Connectable with up to 16 analogue load cells with 350 Ohm input resistance (45 1000 Ohm cells) **and to the main digital load cells available on the market.** Filtering system through programmable software, adjustable according to the system.
- Management of a weighing system with digital equalisation of the 4 cells or management of up to 4 independent weighing systems (depending on the application software).
- Power supply: from 8Vdc to 40Vdc and, upon request, 100-240Vac (with the ALSW optional external power supplier).
- Operating temperature: from -10 to +40°C.
- Connectable to printers and labellers through the available command drivers.

Scale Indicator for Industrial Systems

Multifunctional microcontroller/ weight indicator for use in industrial systems. 16 outputs and 8 digital inputs, 3 RS232/RS485 serial outputs, 16 bit analogue output, Sysway transmission protocols and RTU Modbus are some of the features of this indicator, which, added to the range of available application software programs, allow the use in dosage and weight verification applications, with direct management of the automation. CE-M approvable (OIML R-76 / EN 45501, OIML-R51/OIML-R61).

CPWE Enterprise Specifications

Main Certifications:

- EU Type Examination Certificate (45501:2015)
- OIML R76
- OIML R51 - MID Automatic check weighers (require "CHECK" firmware option)
- OIML R61 - MID Automatic filling machines (require "BATCH-R61" firmware option)

Application Software supplied as standard:

- **BATCH1:** Single product dosage systems in loading and unloading

Optional application software:

- **AF01:** Totalization and formula weighing
- **AF02:** Pieces/quantity counting
- **AF03:** Weighbridges - Input/Output vehicle
- **AF04:** Statistical checking of prepackaged goods
- **AF05:** Price computing and industrial labelling
- **AF09:** Dynamic and static axle weighing with 2 platforms
- **BATCH:** Multicomponent dosage systems in loading and unloading
- **CHECK:** Weight packages on a conveyor belt functions
- **BELT:** Reading/regulation function of the flow on the weighing belt
- **LW:** Continuous dosage in unloading

Customised Applications:

Thanks to our integrated development, you can create complete customised applications in autonomy:

- wizards, operator messages
- serial port management, protocols customization
- digital I/O full management
- sequential or simultaneous automations
- data entry, custom archives

Dini Argeo can offer the service of custom development programs.

I/O Section:

- **2 RS232 serial ports** configurable for connection to PC, printers, labellers, ethernet model (optional), remote scale, repeater, serial bar code reader or other external units.
- **RS232/RS485 port** configurable for PC, PLC, or other external units.
- **Keyboard emulation input** for connection to PC keyboard or bar code reader, through cable with mini DIN connector (optional).
- **16 optoisolated electronic outputs** 0.15A 48Vac / 0.15A 60Vdc configurable as weight thresholds or for automation management (depending on the software program).
- **8 optoisolated inputs**, configurable as remote function keys or for automation management (depending on the software program).
- External Profibus interface (optional), for automation management (depending on the software program).
- Optional Bluetooth connection, for quick wireless programming of the activities and the formulas, through PC, tablet or smartphone.

Parts

Part #	Description
Available Versions	
CPWE	Microcontroller for panel mounting with BATCH1 software. Aluminium case with IP65 front panel protection, 25-key keypad, backlit graphic LCD display, 16 outputs and 8 inputs.

Options

Part # Description

Available Firmwares

AF01	Software for totalization and formula weighing.
AF02	Software for piece/quantity counting.
AF03	Software for weighbridges, input/output vehicle. For 3590 and CPW weight indicators.
AF04	Software for statistical checking of prepackaged goods.
AF05	Software for price computing and industrial labelling.
AF09	Software for dynamic and static axle weighing with 1 or 2 pads.
BATCH	Software for multicomponent dosage systems in loading and unloading. NOTE: For 3590, IOEXPB expansion board is required.
CHECK	Software for packages weighting on a conveyor belt functions. R51 approvable.
BELT	Software for reading/regulation of the flow on the weighing belt.

Software to Fill in the Databases

DBM	PC software for quick filling out of the databases. For 3590Exx and CPWExx instruments (the price is intended for the license to manage one scale).
------------	---

Junction Box / Boards - Load Cell Cables

LCCBC	Cable for connection between platform and indicator, l=50cm. Female connector to be soldered.
LCCB5C	LCCBC cable + 5m extension cable.
LCCB10C	LCCBC cable + 10m extension cable.

Approval for Sale to Third Parties

KCEM	Plates and Welmec form for legal trade use of a scale. NET PRICE. Service available in combination with a Dini Argeo indicator.
-------------	---

Power Supply for DIN Bar

MDR2012	12Vdc power unit for DIN bar. 110/240Vac input. Voltage regulation range 10.8-13.2V, Max 20W, CE and UL certified. Not compatible with BOX2121S.
DR1512	12Vdc power unit for DIN bar. 110/240Vac input.

Storing Weighments

USBC-1	Built-in USB port kit for data storing on USB key. Fitted with USB key for PC.
USBK	Set of 5 USB keys for recording the weighs.

Part #	Description
SWM	"WeiMonitor" PC program to monitor and record in real time weighs performed on the connected scale (the price is intended for the license to manage one scale).
Printers / Labelers	
14TPRC	Connection cable kit for TPRP-2.
TPRPCAL	5Vdc power supply unit.
PR80-3	Thermal printer with paper cutter. Paper roll not included.
LP542TE	Thermal transfer or direct thermal labelling machine Supplied with standard peel mechanism. Maximum printing size 25400 x 108 mm. Maximum roll Ø 127 mm and width up to 112 mm. Label roll and ribbon not included.
SMTPLUS-2	Thermal transfer or direct termal labeller. Peel-off kit in option. Maximum print size 25400 x 108 mm. Maximum roll Ø 203 mm and width up to 118 mm. Label roll and ribbon not included.
SMTRPK-1	Label peel-off and rewind kit for SMTPLUS-1 labeller.
LX300PRO	DotMatrix impact printer. Paper not included.
TM295	DotMatrix impact printer. Paper / Labels / Tags not included.
RSCBLX	RS232 cable l=1,5m for LX300, TM295 printers.
RSCBLP	RS232 cable l=1,5m for LP542xx, SMTPLUS printers.
RSCBLP10M	RS232 cable l=10m for LP542xx, SMTPLUS printers.
RSCBSHTP	1,5 m cable for connecting PR80-3 printer.
RSCBSHTP10M	10m cable for connection to the PR80-3 printer.
PRNSERV	Custom-made ticket (up to 4 layouts). NET price.
APRNSERV	Custom-made label (up to 4 layouts). NET price.
Communication Interfaces	
OBRF2G4	External 2.4 GHz radio module, cable l=3m. ABS IP65 protecting box, 3 m cable, power supply from weight indicator. Max. distance, in appropriate environmental and installation conditions: 45 m indoors, 140m outdoors. 39 configurable channels.
PROFI232-1	External RS232/RS485/PROFIBUS interface for DIN bar. Connectable to the indicators with Profibus protocol with PCB, terminal blocks, plastic box and UL-marked labels (if applicable).
SETHDIN-1	RS232 / RS485 / Ethernet converter. Modbus RTU / Modbus TCP/IP (if applicable). Connectable to all Dini Argeo weight indicators via the serial port. ABS housing for DIN rail. With PCB, screw terminals, plastic box and UL marked labels (if applicable).
DAC160-2	Built-in optoisolated analog output, 0-4/20 mA, 0-10VDC (cable gland excluded). For DFW, 3590 and CPW indicators. Output -10/+10VDC upon request, only at time of order. NOTE: For 3590, IOEXPB option board is required, available depending on the model.

Part #	Description
ADC16I	Built-in analogue input, 0-4/20 mA, 0-10VdC (cable land excluded). A/D 16 bit converter, maximum applicable resistance on the input in current is equal to 250 Ohm, minimum applicable resistance on the input in voltage equal to 15KOhm. Compatible with DAC16O-2.
RS485OPTO	Built-in optoisolated RS485 interface (mounting and cable gland excluded).

Weight Repeaters

DGT100R-1	Weight repeater with 100mm LED display. IP68 stainless steel case, 5-key keypad, air valve for regulating the humidity and the pressure.
GLR100	RS485 alphanumeric repeater with 110 mm multicolour LED display. Complete with 10m RS485 cable with IP67 connector.

Options for ATEX Version

ZBA1S	Intrinsic protection three channel Zener barrier. Specific for connection to load cells, for mounting on DIN rail in a safe area, or in a flame-proof case. Marking: ATEX/IECEx II (1) GD [Ex ia Ga] IIC [Ex ia Da] IIIC. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
KZBA-1	ATEX ABS housing kit with Zener Barrier ZBA1S for load cells. For intrinsically safe weighing systems in a dangerous zone. Dimensions 179x359x166,5mm. Marking of housing + Zener Barrier ZBA1S: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc X for gas, ATEX II 3(1)D Ex tc [ia Da] IIIC T135°C Dc IP66 X for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
KMB4-1	Kit of 3 ATEX Zener barriers for load cells, in an ABS box. For up to 4 load cells of 350 ohm, for intrinsic protection weighing systems in a dangerous area. Marking of the whole box with three Zener barriers: ATEX II 3(1)G Ex nA [ia Ga] IIC T4 Gc (-20°C = Ta = +40°C) for gas, ATEX II 3(1)D Ex tb [ia Da] IIIC T130°C Dc IP65 (-20°C = Ta = +40°C) for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN and IT).
DCATEXMB4	ATEX declaration for the whole system with Dini Argeo Zener barriers. Ex II 2G IIC T6 Gb X e Ex II 2D IIIC T125°C Db X system, with label of the whole system, for weight indicator connected to Dini Argeo zener barriers, connected to a mechanical structure with ATEX load cells (each cell must be certified with CCATEX option). Provided with descriptive document of the assembly and ATEX EU declaration of conformity of the assembly (EN and IT).
JB4QA	ATEX equalisation box made of ABS IP67, for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dust. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
JB4QAI	ATEX equalisation box made of stainless steel IP66 for up to 4 cells. 4 + 1 fairleads. Marking: ATEX II 2G Ex ib IIC T6 Gb for gases, ATEX II 2D Ex tb IIIC T115°C Db IP65 for dusts. Provided with safety instructions and the ATEX EU declaration of conformity (EN, DE, FR, ES and IT).
EXCB6	Blue shielded cable 6x0.22 mm ² , only for EX i (2GD) assemblies. PVC inner sheath. Tinned copper braid shielding. Polyurethane outer sheath, diameter 5.8 mm. Temperature range: -40 / +80 °C. Minimum bending radius >= 7 x O.D. €/m. Maximum orderable length: 100 m (longer lengths available only upon request).

PC Keyboard / Scanner / Connection Cable

SCCDR2-1	1D optical barcode reader with stand. Power cable and RS232 communication cable with weight indicator and stainless steel cable gland included.
-----------------	---

Part #	Description
SC2D	1D/2D optical barcode reader with stand. Power cable and RS232 communication cable with weight indicator and stainless steel cable gland included.
Remote Control	
TLRP	Radio frequency remote control and receiver with extension, for installations where other option boards with connection to AMP are required.
Accessories	
TECSUP	Technical assistance by telephone upon request.
UMAN	Printed user manual (Free download from the website).
TECMAN	Printed technical manual (Free download from the website).
ECEMDOC	Printed EU declaration of conformity, EU certificate of verification, test certificate and metrological book (free download from our website, only for approved CE-M products). NET €.

**Dini Argeo S.r.l. | Via della Fisica, 20 - 41042, Spezzano di Fiorano, Modena (MO), Italy | Tel.:
+39 0536 843418**

www.diniargeo.com