PENKO
an ETC Company

SAI-CK
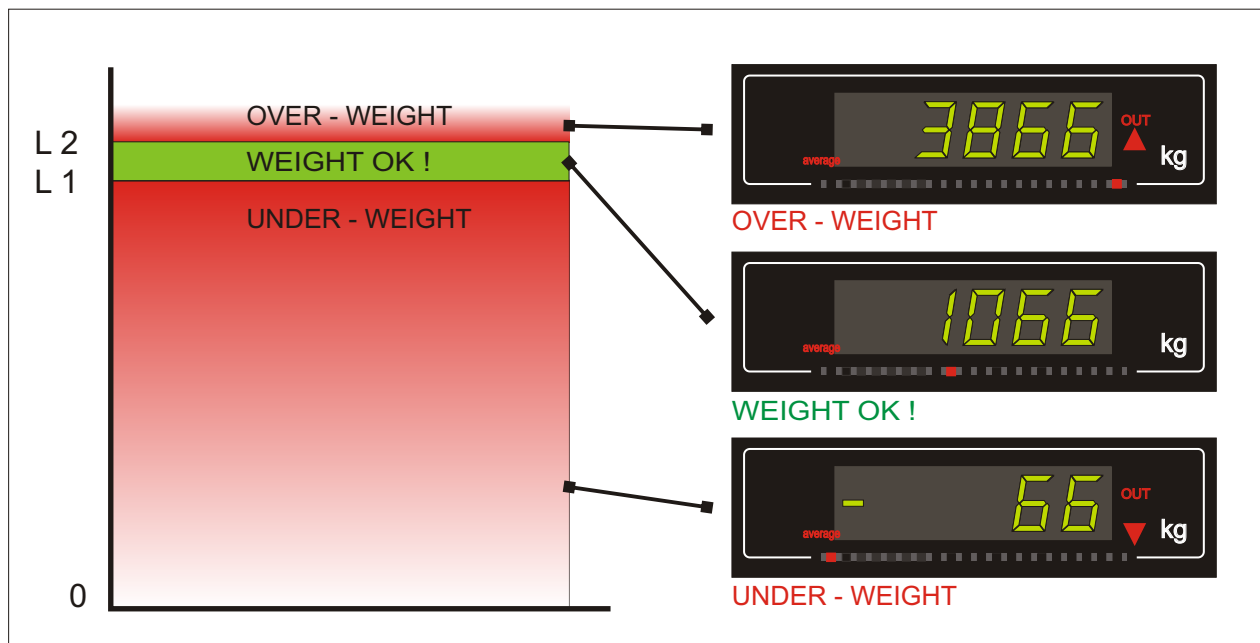
Check weighing indicator SAI-CK

Certified by NMI : TC 2636, 4000 div. 1d => 1µ V

- The solution for In-Line checking.

- Very Fast. 250 Weighing samples per second.

- Too High, too Low or Go judgement in milliseconds.

- Display and Led-bar showing results.

- 1 Solid state contact for Too High and 1 for Too Low.

- 1 Input for photocell. Start sequence

- RS232   interface WITH PRINTER PROTOCOL.

- Panel mounting (Other types available).

- Extruded and machined ALU-housing.

NAW
EN 45501

CE
Severe Industrial
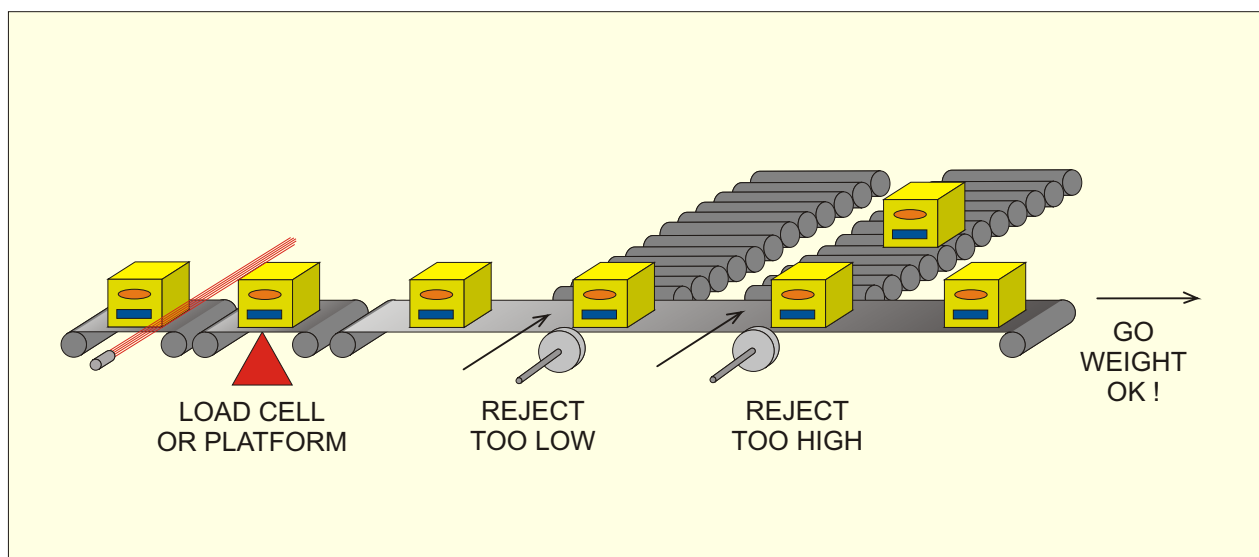
CE
Low Voltage

CE
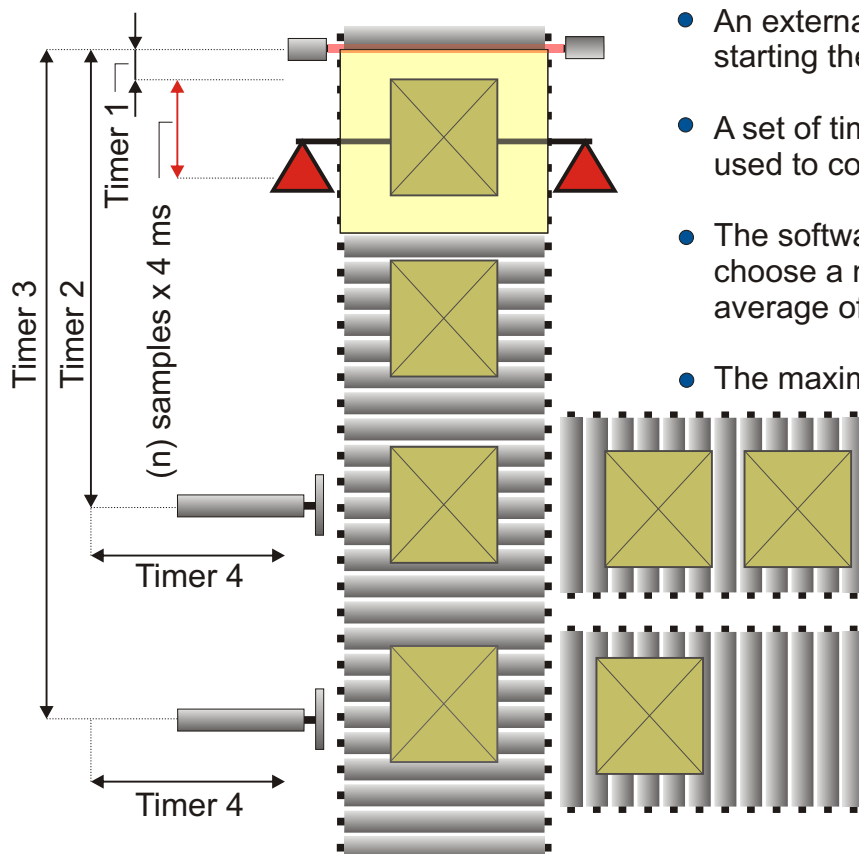Domestic

Check weighing indicator SAI-CK

It is easy to get a high quality judgement about the weight of an object. Utilizing advanced weighing technology for extreme quick weighing provides solutions for all kinds of check weighing applications. For you the SAI-CK is the easy solution. Just combine it with a load cell or a platform. Use the check weighing indicator as a component in your larger application.
Full digital set up and calibration combined with easy installation makes the instrument exactly what you need.

OVER - WEIGHT

WEIGHT OK !

UNDER - WEIGHT

The Indicator shows : Underweight by the arrow point down and a dot on the left side of the led-bar. Overweight by the arrow point up and a dot on the right side of the led-bar.
When the weight is correct we find the dot somewhere in the middle of the led-bar.
The led-bar dimension is scaled to the weight OK-band. These indications are there for maximum 1 second or are instantly refreshed by a new value.

LOAD CELL OR PLATFORM

REJECT TOO LOW

REJECT TOO HIGH

GO WEIGHT OK !

HOW TO USE IT.

- Set the Hi- and Lo limit direct with the "M" front key.

- An external photoelectric switch is starting the check weighing cycle(s).

- A set of timers set at milliseconds are used to control the reject devices.

- The software provides the possibility to choose a number of samples for the average of the real value.

- The maximum number of items in

  progress is four.
  That means that one item is possible between the checking and rejection areas.

Timer 3
Timer 2
Timer 1
(n) samples x 4 ms
Timer 4
Timer 4

PRINT THE RESULTS.

The printout HEADER and FOOTER are programmable.
The installed printer totalises and prints automatically, when the number of items checked exceeds a preset value or 60.000 or the total weight is beyond a value of 9.999.999.
The layout is standard 24 characters wide.

The printout provides you the following items:
- The Date and Time the print was prepared.
- The LOW LEVEL. This level activates the reject mechanism for items with a lower weight.
- The HI LEVEL. This level activates the reject mechanism for items with a higher weight.
- Tare PT= It is the value of the preset tare. The checked weight is now the net weight.
- Subtotal or Total. The subtotal is often used as a progress report. After the job is done we print a total report, by doing this we also set the memories on zero.
- The Average on the printout shows the average of all the accepted packages.
- Under and Over gives us the number of packages rejected with a wrong weight.

An "e"-Mark protocol is on request. This replaces the printer protocol. It can be used for "e-Mark" reporting PC.programs.

```
----------------------
PENKO ENGINEERING B.V.
DATE     :  05-09-96
TIME     :     09:15
LO LEVEL :    0.995 kg
HI LEVEL :    1.010 kg
TARE  PT :    0.100 kg
SUBTOT.  :  123.174 kg
AVERAGE  :    1.001 kg
COUNT    :      123
UNDER    :        7
OVER     :        5
    WEIGHING = PROFIT
----------------------
```
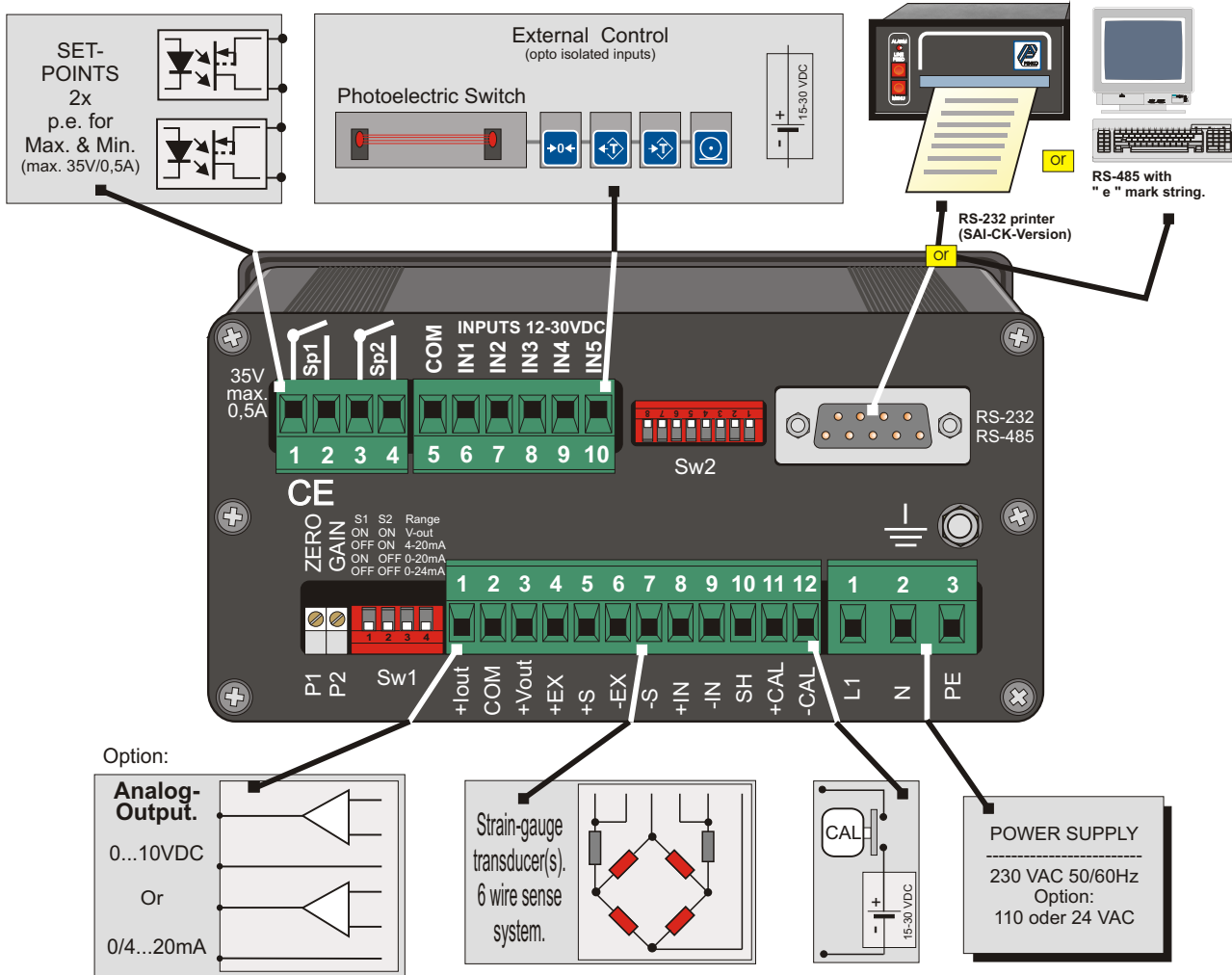
```
----------------------
PENKO ENGINEERING B.V.
DATE     :  05-09-96
TIME     :     09:16
LO LEVEL :    0.995 kg
HI LEVEL :    1.010 kg
TARE  PT :    0.100 kg
TOTAL.   :  123.174 kg
AVERAGE  :    1.001 kg
COUNT    :      123
UNDER    :        7
OVER     :        5
    WEIGHING = PROFIT
----------------------
```

Product info

SET-POINTS 2x p.e. for Max. & Min. (max. 35V/0,5A)

External Control (opto isolated inputs)

Photoelectric Switch

15-30 VDC

RS-232 printer (SAI-CK-Version)

or

RS-485 with " e " mark string.

or

35V max. 0,5A

Sp1 Sp2

INPUTS 12-30VDC
COM IN1 IN2 IN3 IN4 IN5

1 2 3 4   5 6 7 8 9 10

Sw2

RS-232 RS-485

CE

ZERO GAIN

S1	S2	Range
ON	ON	V-out
OFF	ON	4-20mA
ON	OFF	0-20mA
OFF	OFF	0-24mA

P1 P2   Sw1

1 2 3 4 5 6 7 8 9 10 11 12   1 2 3

+Iout COM +Vout +EX +S -EX -S +IN -IN SH +CAL -CAL   L1 N PE

Option:

Analog-Output.

0...10VDC

Or

0/4...20mA

Strain-gauge transducer(s). 6 wire sense system.

CAL

15-30 VDC

POWER SUPPLY
----
230 VAC 50/60Hz
Option:
110 oder 24 VAC

Specifications:

Power supply	230 Vac - 50/60 Hz, +/- 10%, 24Vac or 115 Vac optional.
Wiring	full Wheatstone bridge with sense connections.
Display	5 digits 0,56" - 14,2 mm. Ultra Bright.
Display speed	1-10 readings per second.
Excitation voltage	10 V DC, suitable for 1-4 loadcells with a bridge resistance of 350 Ohm.
Input range	+/- 23 mV. Verification unit 1 µV/part.
Conversion speed	250 samples/second.
Linearity	< 0,006 % FS.
Resolution	1/65,000 counts. (16bit internal)
Temperature effect	on zero <= 12 ppm/°C.on span <=10 ppm/°C.
Temperature range	-10 - + 40°C.
Analog filter	12 dB./octave e.g.40dB/decade 2,5 Hz.
Digital filter	36 dB/octave e.g. 120dB/decade 10Hz
Digital output	Isolated RS 232, 1200/9600 Baud or 4-wire RS422.
Inputs	5 optical isolated 12-30 V. DC.
Outputs	2 solid state outputs 10-35 Vdc or ac max 0,5A.
Consumption	14 Watt. with 4 loadcells- 350 Ohm.
Dimensions	150 x 78 x 180 (depth 250mm at certified version).
Weight	appr. 1800 g
Certification	TC 2636 (for 4000 div).

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