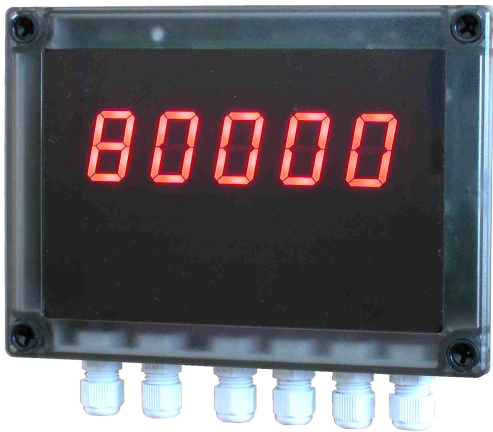


Weight-transmitter w. separate load cell inputs



- * Separate connections for up to 8 load cells
- * Individual monitoring on each cell
- * 5 digits - 25 mm display
- * Digital input w. programmable functions
- * 3 solid-state outputs (AC/DC)
- * Programmable analog output (I / U)
- * Tara function.
- * Communication: RS 485 MODBUS
- * Powersupply: 24 V AC / DC (galvanic isolation)
- * Galvanic isolated input and outputs
- * Box Protection degree: IP 67
- * Dimensions: 180 X 130 X 35 mm

Typical applications:

Industrial instrumentation, wherein the weight or mechanical stress is shown at the same time that the signal is transmitted from the measuring location to the central monitoring panel.

The collection of individual measurement values from up to 8 cells.

Junction box is only required if you want more than 8 load cells connected.

Description:

Weight-transmitter with up to 8 differential inputs including cell supply. Separate connection of 1 to 8 load-cells. The unit allows for individual monitoring of each cell, so that even complex weight or force measurements can be made. Any weight / force distribution themes may in this way be analyzed.

Measurement may of course be made conventionally with all cells simultaneously.

The supply is galv. isolated 24 V AC / DC.

The transmitters extensive setup options can either be activated by 3 pushbuttons located under the cover or via the serial communication channel RS485. Analog output 0 - 20mA or 0 - 10V is galvanic separated from other potentials.

Logic (digital) input and outputs are electrically isolated too.

The digital input react to both AC and DC signal. Outputs are solid state relays with potential-free connections, each of which can handle up to 120mA.

A built-in 5 digit display may be scaled independently of the output signal. Direct input of load cell data allows for replacement of load cell without recalibration of the system.

Waterproof housing (IP67) has been designed for in-field installation.

Electrical specifications:

Temperature range:	-10... 60 °C
Powersupply:	19 - 25 V AC or 12 – 38 VDC
Power Consumption:	Typ. 115 mA @ 24 V DC (w. 4 x 350 ohm load-cells, 20mA out)
Response time:	65 mS – 10 S (programmable)
Calibration:	Better than +/- 0.2% FS
Temperature coefficient:	Typ. +/- 0.01% FS/°C
Linearity:	Typ. +/- 0.1% FS
Wiring fault indication:	Output indicates 3.5mA or 21mA (programmable)

Input data:

No. of load-cell inputs:	8
Measuring range:	0.25...30 mV / Vexc. (using load cells)
Exc. voltage:	typ. 4 V DC
Max. Input range:	2000 mV (direct voltage measurement)
Resolution:	Min. span: 0.1 mV @ max output level
Digital input:	Galv. isolated 24 VDC/AC

Outputs:

Analog output:	Galv. isolated 0..20 / 4..20 mA / 0..10 VDC (Programmable choice)
Load:	Max. 500 Ohm

3 x solid state: Programmable utilities. 50V each max. 125mA

Communication:

Serial 2 wire RS485 using MODBUS.
Connection for an extra external 5 digit large display is possible.

Mechanical specifications:

Box material:	ABS/PC
Degree of protection :	IP67
Dimensions:	180 X 130 X 35 mm

Weight: apex. 450 g

Ordering key:

TL 729- xy

x (input): 1 = mV input (8 x load cells)
2 = mA input (1 input, no outputs)

Eks: TL729-13

y (display): 0 = no display
1 = 4 digit display, 13mm
2 = 5 digit display, 10mm
3 = 5 digit display, 25mm

Loadcell-input, 25mm display

Programming options:

The following may be programmed via push-bottoms or via serial communication:

Scaling of the inputs and outputs, signal conversion time, response time, load cell data, features for the digital input signals and for analog output, U or I output type, output limitations, RS485 communication setup, termination, tare value. Setup data may be code protected against accidental change.

IPC TEKNIK ApS

Messingvej 48A
DK-8940 Randers SV

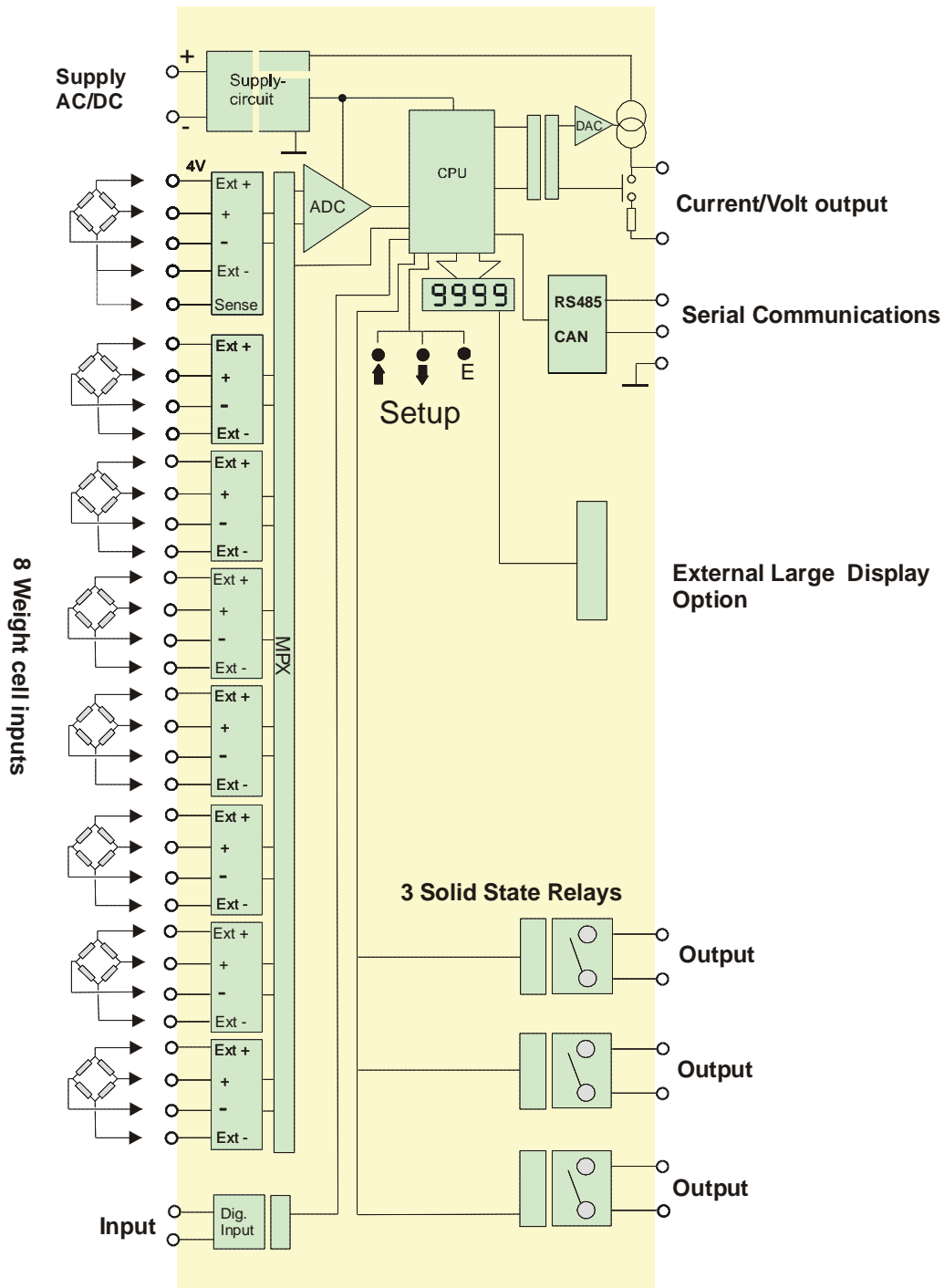
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Schematics:



Terminal connections:

No	Name	Description
1	NINV	RS485
2	INV	RS485
3	GND	RS485
4	+24V	Power
5	-24V	Power
6	-20mA	Analog out
7	+20mA	Analog out
8	EX+	cell4
9	IN+	cell4
10	IN-	cell4
11	EX -	cell4
12	FR	cell4
13	EX+	cell3
14	IN+	cell3
15	IN-	cell3
16	EX -	cell3
17	FR	cell3
18	EX+	cell2
19	IN+	cell2
20	IN-	cell2
21	EX -	cell2
22	FR	cell2
23	SNS	cell1
24	EX+	cell1
25	IN+	cell1
26	IN-	cell1
27	EX -	cell1
28	FR	cell1

No	Name	Description
29	Rel1	Relay1
30	Rel1	Relay1
31	Rel2	Relay2
32	Rel2	Relay2
33	Rel3	Relay3
34	Rel3	Relay3
35	Din	Digital input
36	Din	Digital input
37	+24V	Power
38	-24V	Power
39	EX-	cell8
40	IN+	cell8
41	IN-	cell8
42	EX+	cell7
43	IN+	cell7
44	IN-	cell7
45	EX -	cell7
46	FR	cell7
47	EX+	cell6
48	IN+	cell6
49	IN-	cell6
50	EX -	cell6
51	FR	cell6
52	EX+	cell5
53	IN+	cell5
54	IN-	cell5
55	EX -	cell5
56	FR	cell5

Loadcell signals

SNS	Sense signal to compensate for the resistance of the sensor GND supply line
EX+	Excitation voltage to the cell positive supply
IN+	Signal from the cell sensor, by positive impact this will be larger
IN-	Signal from the cell sensor, by positive impact this will be less
EX -	Cell Sensors lowest supply
FR	"Frame" connection to protective frame.

Subject to change without further notifications

TL 729 160809

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