PAVONESYSTEMS

General information

PWS24120240318

The DAT 1400 Analog weight transmitter has a mechanical keyboard, removable screw terminal blocks and a peak hold function for dynamic measures. DAT 1400 Analog is a completely customizable product which may offer several options. The Software Optimation is given for free. This Software allows you to run certain activities such as calibration or monitoring directly from your computer. The Optimation software is provided by Pavone Systems and guarantees a perfect instrument run.

Software Optimation 1.8.23: optimation_weighing_software.zip

Technical Manual: dat-1400_technical_manual.pdf

Technical specifications

PWS24120240318

Measuring range:	-3.9 ÷ +3.9 mV/V
Input sensitivity:	0.02 µV/count
Full scale non-Linearity:	<0.01%
Gain drift:	< 0.001% FS/°C
Display:	6 digit, 7-segment LED red, height 14mm
A/D Converter:	24 bit
Internal Resolution:	> 16.000.000 points
Trasducer input voltage:	5 Vdc (max 8 load cells - 350 Ohm)
Frequency signal acquisition:	12 ÷ 1000 Hz
Visible resolution (in divisions):	999999
Divisions value (adjustable):	x1, x2, x5, x10, x20, x50
Decimal figures range:	0 ÷ 4
Temperature range:	-10 ÷ + 50 ° C (humidity max 85% no condensation)
Storage temperature:	-20 ÷ +70°C
Filter:	0.5 ÷ 1000 Hz
Logic output:	2 opto-isolated; max 24 Vdc/100 mA each
Logic input:	2 opto-isolated 24 Vdc PNP (external power supply)
Serial port:	1 USB device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocoll
Analog output Non-Linearity:	< 0,02%
Temperature drift analog output:	0,001% FS / °C
Power supply:	12-24 Vdc ±15% - Power consumption 5 W
Microcontroller:	ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard from USB
Data storage:	64 Kbytes expandable up to 1024 Kbytes
Regulatory compliance:	EN61000-6-2, EN61000-6-3 for EMC; EN61010-1 for Electrical Safety
Analog output:	optoisolated 16-Bit Voltage: 0 to 5/10 V (R min10 K Ohm), Current: 0/4 to 20 mA (R max 300 Ohm)

All indicated data may be changed without notice.
All the measures indicated are expressed in millimeters (mm).

PAVONESYSTEMS

RS 485/Modbus
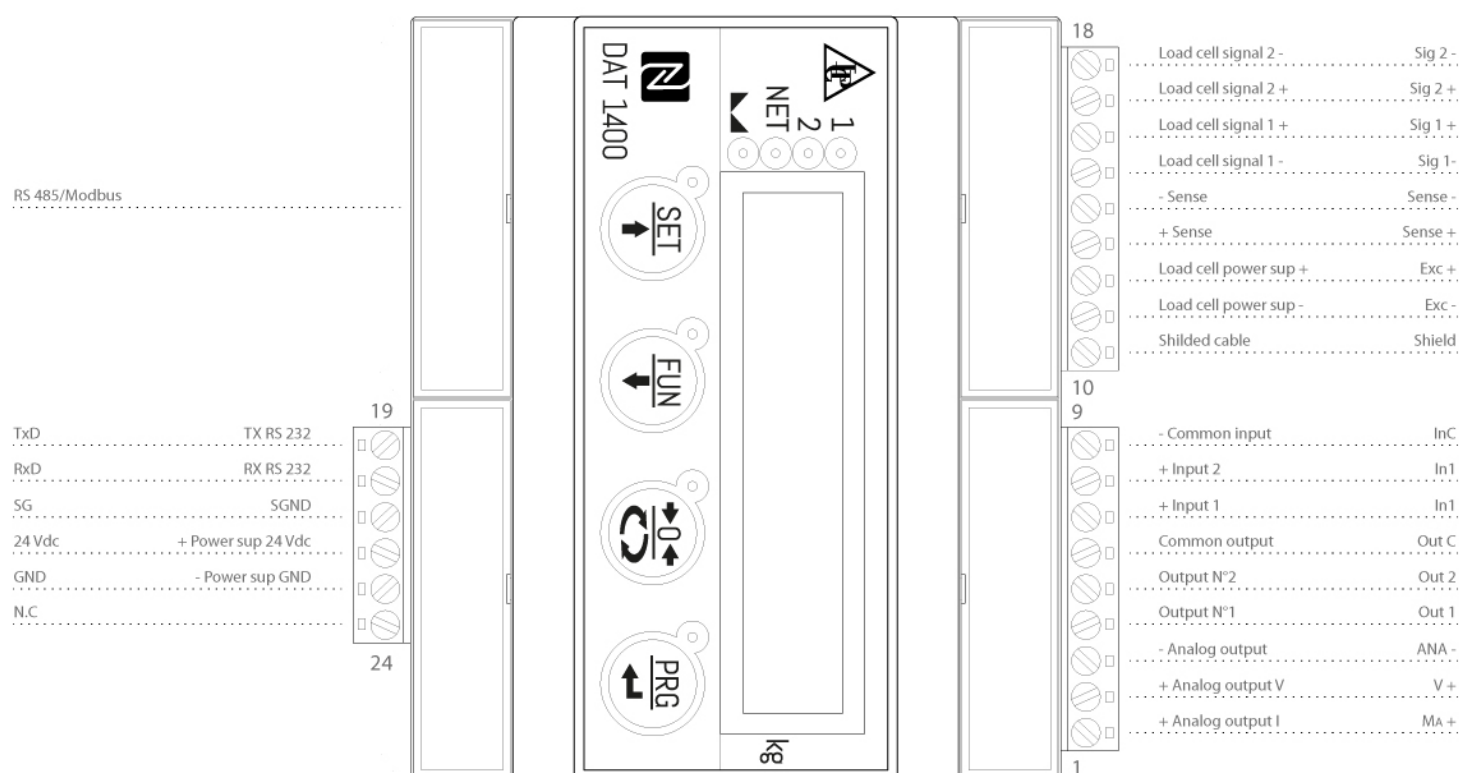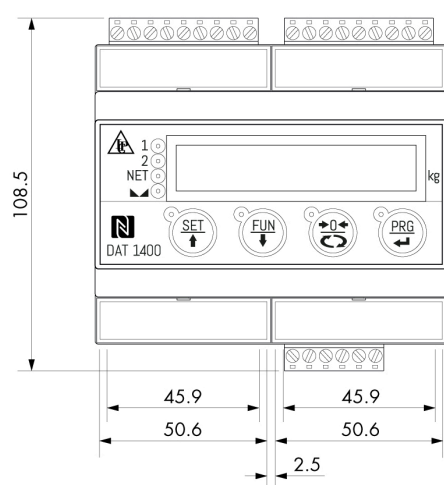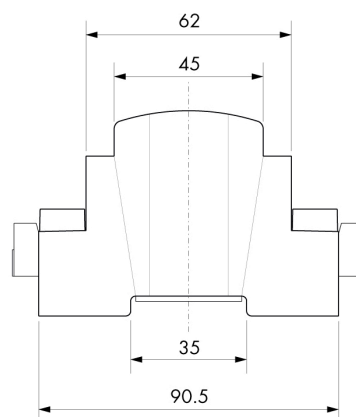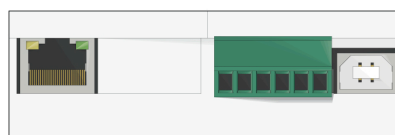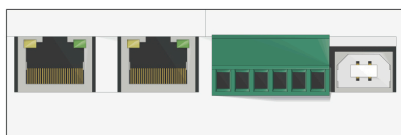
TxD	TX RS 232	
RxD	RX RS 232	
SG	SGND	
24 Vdc	+ Power sup 24 Vdc	
GND	- Power sup GND	
N.C		

DAT 1400

NET
1
2

SET
FUN
0
PRG

kg

18

Load cell signal 2 -	Sig 2 -
Load cell signal 2 +	Sig 2 +
Load cell signal 1 +	Sig 1 +
Load cell signal 1 -	Sig 1-
- Sense	Sense -
+ Sense	Sense +
Load cell power sup +	Exc +
Load cell power sup -	Exc -
Shilded cable	Shield

10
9

- Common input	InC
+ Input 2	In1
+ Input 1	In1
Common output	Out C
Output N°2	Out 2
Output N°1	Out 1
- Analog output	ANA -
+ Analog output V	V +
+ Analog output I	MA +

1

19
24

RS 485/Modbus

Ethernet

Serial communication interface

Ethercat

Ethernet/IP

PROFINET