**PAVONE**SYSTEMS

# General information

PWS24620251215

The weight transmitter DAT 1400 Ethercat has a mechanical keyboard, a removable screw terminal blocks and a peak hold function for dynamic measures. DAT 1400 Ethercat is a customizable product which owns several options such as: power supply to external smart junction box and DATALOGGER function, ecc. 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 1.8.29: optimation_weighing_software.zip

Technical Manual: dat-1400_technical_manual.pdf

Ethercat ECS file (NIC50): ethercat_nic50_ecs.zip
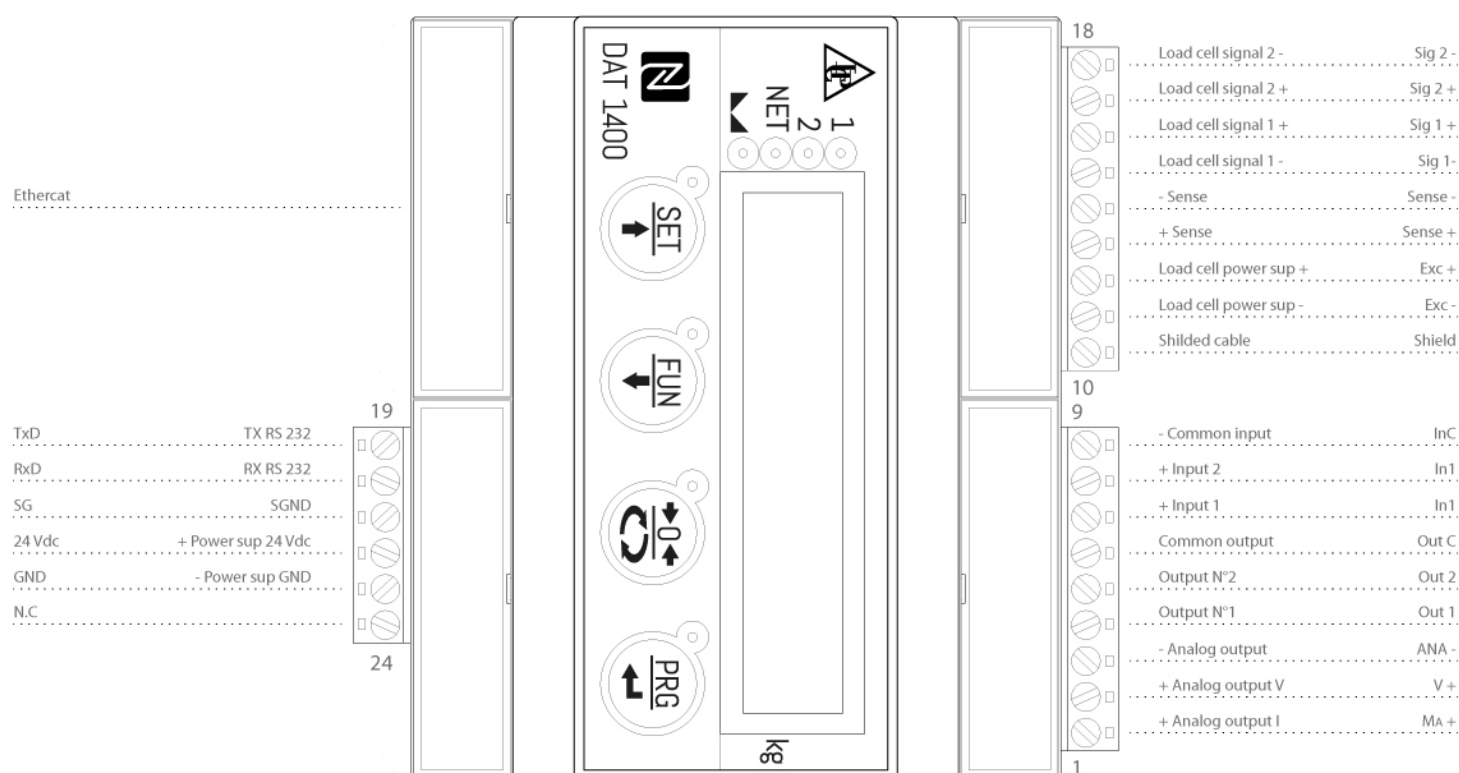
Ethercat ECS file (NETX90): ethercat_netx90_ecs.zip

**PAVONE**SYSTEMS

# Technical specifications

PWS24620251215

| | |
|---|---|
| **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 -350 Ohm- load cells) |
| **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 inputs:** | 2 opto-isolated 24 Vdc PNP (external power supply) |
| **Serial port:** | 1 USB device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocol |
| **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 |

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Industrial Electronic Weighing Systems since 1963

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**PAVONE**SYSTEMS



Ethercat

DAT 1400

NET 1 2

SET

FUN

PRG

kg

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| 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

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

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# Weight Transmitter **DAT 1400 Ethercat**

available with certification • UL • EAC

RS 485/Modbus

Ethernet

Serial communication interface
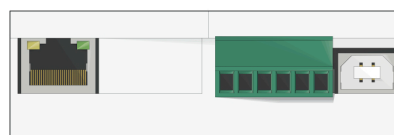
Ethercat

Ethernet/IP

PROFINET