General information

PWS38220261105

The DAT 700 weight transmitter rewrites the concept of high performance at a small price. This weight transmitter is practical, compact, and configurable via panel keys or the Optimation software, which can ensure configuration upload and download, as well as real-time filter viewing. The DAT 700 weight transmitter is available in serial and/or analog versions, or as a bipolar version. Various Fieldbus are available through an external module. **The load cells that can be connected to this transmitter are analog and/or amplified in voltage and current.**



Software Optimation 1.11.22: optimation_weighing_software.zip

Technical Manual: dat-700_technical_manual.pdf

Installation Manual: dat-700_installation_manual.pdf

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

Technical specifications

PWS38220261105

Power supply:	10-30VDC protected against reverse polarity. Protection with resettable fuse
Insulation:	Class II
Operating temperature:	-10°C ± +40°C (max. non-condensing humidity 85%)
Storage temperature:	-20°C ± +60°C
Display:	numerical 6-digit red 7-segment led (h 14 mm)
Dimensions:	96 mm x 48 mm x 100 mm (w x h x d) (terminal blocks included)
Material:	self-extinguishing PPO (UL 94 V0)
Electrical connection:	removable screw 5.08 mm pitch terminal blocks
Cell input:	max 8 of 350 ohms in parallel
Operating voltage:	5Vdc (cell input), ± 10 V / ± 5 V (analog voltage output), 0 ± 20 mA / 4 ± 20 mA (current analog output)
Output linearity:	< 0.01% of full scale (cell input), 0.03% of full scale (current analog & analog voltage output)
Temperature drift (Input):	< 0.001% of full scale / C° (cell input), 0.002% of full scale / °C (current analog & analog voltage output)
Internal Resolution:	24 bits (cell input), 16 bits (both current analog and analog voltage output)
Measuring range:	from -7.6 mV/V to +7.6 mV/V
Filter:	selectable 0.1 Hz - 1000 Hz
Decimal figures range:	0 to 4 decimal digits
Logic output:	2 photo relay outputs (24 VDC/Vac one NO contact) Relay contact rating 100 mA
Logic inputs:	No. 2 opto-isolated
Serial port:	Rs232 half duplex, Rs485 half-duplex, USB Device for instrument programming and setting
Baud rate:	Up to 115 kb/s (default 9600 b/s)
Fieldbus:	PROFIBUS DP-V1, PROFINET, CANOPEN, ETHERNET IP, ETHERCAT, ETHERNET (with external module)
Calibration:	Digital from buttons (both current and analog voltage output)
Impedance:	minimum 10K Ohm (current analog output), maximum 300 Ohm (analog voltage output)
Microcontroller:	32-bit ARM Cortex M0+, 256KB Flash reprogrammable on-board by USB
Data storage:	32 Kbytes + optional Aliby memory (1MByte)
Regulatory compliance:	EN61000-6-2, EN61000-6-3 for EMC, EN61010-1 for Electrical Safety

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Product Code	Product Model
PSDA0070	DAT 700 BASIC
PSDA0700	DAT 700 ANALOG
PSDA7001	DAT 700 PROFIBUS
PSDA7002	DAT 700 PROFINET
PSDA7003	DAT 700 ETHERNET IP
PSDA7004	DAT 700 ETHERNET
PSDA7005	DAT 700 ETHERCAT
PSDA7006	DAT 700 CANOPEN
PSDA7007	DAT 700 ANALOG + PROFIBUS
PSDA7008	DAT 700 ANALOG + PROFINET
PSDA7009	DAT 700 ANALOG + ETHERNET IP
PSDA7010	DAT 700 ANALOG + ETHERNET
PSDA7011	DAT 700 ANALOG + ETHERCAT
PSDA7012	DAT 700 ANALOG + CANOPEN
PSDA7013	DAT 700 version INPUT VOLT BASIC
PSDA7014	DAT 700 version INPUT VOLT ANALOG
PSDA7015	DAT 700 version INPUT VOLT PROFIBUS
PSDA7016	DAT 700 version INPUT VOLT PROFINET
PSDA7017	DAT 700 version INPUT VOLT ETHERNET IP
PSDA7018	DAT 700 version INPUT VOLT ETHERNET
PSDA7019	DAT 700 version INPUT VOLT ETHERCAT
PSDA7020	DAT 700 version INPUT VOLT CANOPEN
PSDA7021	DAT 700 version INPUT VOLT ANALOG + PROFIBUS
PSDA7022	DAT 700 version INPUT VOLT ANALOG + PROFINET
PSDA7023	DAT 700 version INPUT VOLT ANALOG + ETHERNET IP
PSDA7024	DAT 700 version INPUT VOLT ANALOG + ETHERNET
PSDA7025	DAT 700 version INPUT VOLT ANALOG + ETHERCAT
PSDA7026	DAT 700 version INPUT VOLT ANALOG + CANOPEN
PSDA7027	DAT 700 version INPUT mA BASIC
PSDA7028	DAT 700 version INPUT mA ANALOG
PSDA7029	DAT 700 version INPUT mA PROFIBUS

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Product Code	Product Model
PSDA7030	DAT 700 version INPUT mA PROFINET
PSDA7031	DAT 700 version INPUT mA ETHERNET IP
PSDA7032	DAT 700 version INPUT mA ETHERNET
PSDA7033	DAT 700 version INPUT mA ETHERCAT
PSDA7034	DAT 700 version INPUT mA CANOPEN
PSDA7035	DAT 700 version INPUT mA ANALOG + PROFIBUS
PSDA7036	DAT 700 version INPUT mA ANALOG + PROFINET
PSDA7037	DAT 700 version INPUT mA ANALOG + ETHERNET IP
PSDA7038	DAT 700 version INPUT mA ANALOG + ETHERNET
PSDA7039	DAT 700 version INPUT mA ANALOG + ETHERCAT
PSDA7040	DAT 700 version INPUT mA ANALOG + CANOPEN
PSDA7041	DAT 700 ANALOG bipolar
PSDA7042	DAT 700 ANALOG bipolar + PROFIBUS
PSDA7043	DAT 700 ANALOG bipolar + PROFINET
PSDA7044	DAT 700 ANALOG bipolar + ETHERNET IP
PSDA7045	DAT 700 ANALOG bipolar + ETHERNET
PSDA7046	DAT 700 ANALOG bipolar + ETHERCAT
PSDA7047	DAT 700 ANALOG bipolar + CANOPEN
PSDA7048	DAT 700 version INPUT VOLT ANALOG bipolar
PSDA7049	DAT 700 version INPUT VOLT ANALOG bipolar + PROFIBUS
PSDA7050	DAT 700 version INPUT VOLT ANALOG bipolar + PROFINET
PSDA7051	DAT 700 version INPUT VOLT ANALOG bipolar + ETHERNET IP
PSDA7052	DAT 700 version INPUT VOLT ANALOG bipolar + ETHERNET
PSDA7053	DAT 700 version INPUT VOLT ANALOG bipolar + ETHERCAT
PSDA7054	DAT 700 version INPUT VOLT ANALOG bipolar + CANOPEN
PSDA7055	DAT 700 version INPUT mA ANALOG bipolar
PSDA7056	DAT 700 version INPUT mA ANALOG bipolar + PROFIBUS
PSDA7057	DAT 700 version INPUT mA ANALOG bipolar + PROFINET
PSDA7058	DAT 700 version INPUT mA ANALOG bipolar + ETHERNET IP
PSDA7059	DAT 700 version INPUT mA ANALOG bipolar + ETHERNET
PSDA7060	DAT 700 version INPUT mA ANALOG bipolar + ETHERCAT
PSDA7061	DAT 700 version INPUT mA ANALOG bipolar + CANOPEN

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