

General information

PVS35420210302

Among the weight transmitters, DAT 11 is the fastest to receive, convert and transmit data thanks to a more performing A/D converter. Thanks to its small size and compact design, the DAT 11 weight transmitter can be inserted in any work environment without taking up too much space. DAT 11 is a customizable product that has a mechanical keyboard with a programmable key block from which it is possible to manually set the weight filter with predetermined values or with individually adjustable parameters. The DAT 11 weight transmitter features removable screw terminal blocks, selectable logic input function, voltage or current analog input, unipolar or bipolar analog output, RS485 junction box connection and peak hold function for dynamic measurements. DAT 11 is a product in step with the times. It complies with EN45501, and the Fieldbus data are updated to 125Hz. Compared to traditional weight transmitters, DAT 11 contains a USB port which allows the firmware update, the connection to the Optimation software and the connection to TESTER 1008, which facilitates calibration and troubleshooting. DAT 11 is able to perform various calibrations: "Dead Weight", "Theoretical" and "Data Sheet". In addition, it presents the linearization of the weight calibration on 5 points. Developed specifically by Pavone Weighing Systems and installed free of charge in the weighing instrument, the Optimation software allows you to simplify and perform various operations such as configuring the instrument and correctly and safely saving data through the DATALOGGER function.





Software Optimation 1.4.17: optimation\_weighing\_software.zip Technical Manual: dat-11\_technical\_manual.pdf



 No 1 Bukit Batok Street 22 #01-01
 Singapore 659592

 Tel: (65) 6561 0488
 Fax: (65) 6561 0588

 Email: sales@scigate.com.sg
 Web: https://scigate.com.sg/

Business Hours: Monday - Friday 8:30AM - 6:15PM

All the measures indicated are expressed in millimeters (mr

**PAVONE SISTEMI S.R.L.** 

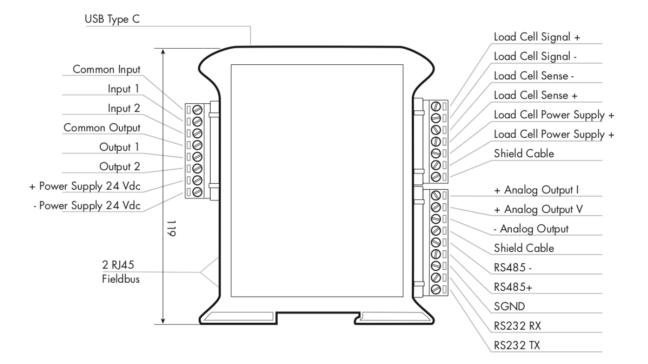
Via Tiberio Bianchi 11/12/13, 20863 Concorezzo (MB), Milan, Italy T (+39) 039 9162656 F (+39) 039 9162675 W pavonesistemi.com Industrial Electronic Weighing Systems since 1963

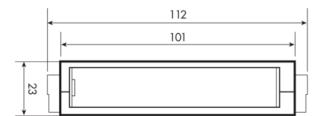


## **Technical specifications**

Neasuring range:.7.6 + 7.6 mVVInput sensitivity:.0.02 µ/countFull scale non-Linearity:.0.02 % FS/°COatin rift:.0.02% FS/°CDisplay:.6.digit, 7.segment LED red, height BmmAD Converter:.2.di B.000.00 pointsInternal Resolution:.9.di 8.000.000 pointsFrequency signal acquisition:.9.di 9.000 pointsNotice resolution (in divisions):.9.9999Divisions value (adjustable):.0.4Temperature range:.0.410 + 50°C (max unidity 85% without condensation)Frequency signal acquisition:.9.4 9.0°CTemperature range:.0.4 2.000 PointsForage tomperature:.0.4 2.000 PointsFull.0.4 2.000 PointsFull.0.200 P		
Full scale non-Linearity:<0.01%	Measuring range:	-7.6 ÷ +7.6 mV/V
Gain drift:< 0.002% FS/°CDisplay:6 digit, 7-segment LED red, height 8mmA/D converter:24 bitInternal Resolution:> di 16.000.000 pointsFrequency signal acquisition:13 ± 1.000 HzVisible resolution (in divisions):999999Divisions value (adjustable):x1, x2, x5, x10, x20, x50Decimal figures range:0 ÷ 4Temperature range:.00 ÷ 40°°CFitter:0.1 ± 250 HzExcitation voltage:2 optisolated outputs; max 24 Vdc/100 mA eachLogic output:2 optisolated outputs; max 24 Vdc/100 mA eachLogic output:.003%Analog output Non-Linearity:.003%Power supply:0.003% FS/°CPower supply:At Vdc (rax M0 + 32 bit 256KB Flash reprogrammable onboard via USBRiccontroller:.ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB	Input sensitivity:	0.02 µV/count
Display:6 digit, 7-segment LED red, height 8mmDisplay:6 digit, 7-segment LED red, height 8mmA/D Converter:24 bitInternal Resolution:> di 16.000.000 pointsFrequency signal acquisition:13 ± 1.000 HzVisible resolution (in divisions):999999Divisions value (adjustable):x1, x2, x5, x10, x20, x50Decimal figures range:0 ÷ 4Temperature range:-10 ÷ +50°C (max umidity 85% without condensation)Storage temperature:-20 ÷ +60°CFilter:0.1 ÷ 250 HzExcitation voltage:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic loput:0.03%Analog output Non-Linearity:-0.03%Power supply:0.003% FS / °CPower supply:24 Vdc ± 10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBRiscorage:24 Vdc storage to 1002K KDy (sptional)	Full scale non-Linearity:	<0.01%
AD Converter:24 bitInternal Resolution:> of 16.000.000 pointsFrequency signal acquisition:13 ± 1.000 HzVisible resolution (in divisions):999999Divisions value (adjustable):11 × 2, x5, x10, x20, x50Decimal figures range:0 ± 4Temperature range:01 ± +50°C (max unidity 85% without condensation)Storage temperature:0.1 ± 250 HzExcitation voltage:0 20 voltolod duputs; max 24 Vdc/100 mA eachLogic output:2 optoisolated inputs 24 Vdc PNP (external power supply)Storage temperature:0.10% CSC * CAnalog output Non-Linearity:0.00% FS / °CPower supply:0.00% FS / °CPower supply:0.00% FS / °CRiter:0.00% FS / °CRiter:0.00% FS / °CPower supply:0.00% FS / °CPower supply:0.0	Gain drift:	< 0.002% FS/°C
Internal Resolution:       > di 16.000.000 points         Frequency signal acquisition:       13 ÷ 1.000 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 (max unidity 85% without condensation)         Storage temperature:       -20 ÷ 460°C         Filter:       0.1 ÷ 250 Hz         Excitation voltage:       4 Vdc (max 4 -350 Ohm- load cells)         Logic output:       2 optoisolated outputs; max 24 Vdc/100 mA each         Logic output:       2 optoisolated inputs 24 Vdc PNP (external power supply)         Strala port:       1.02% FS °C         Analog output Non-Linearity:       -0.03%         Temperature drift analog output:       0.002% FS °C         Power supply:       AtW Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB         Microcontroller:       ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB	Display:	6 digit, 7-segment LED red, height 8mm
Frequency signal acquisition:13 ÷ 1.000 HzFrequency signal acquisition:13 ÷ 1.000 HzVisible resolution (in divisions):999999Divisions value (adjustable):x1, x2, x5, x10, x20, x50Decimal figures range:0 ÷ 4Temperature range:.10 ÷ +50°C (max umidity 85% without condensation)Storage temperature:.20 ÷ +60°CFilter:0.1 ÷ 250 HzExcitation voltage:4 Vdc (max 4 - 350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:10 SP- Celvice + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:.000%Power supply:24 Vdc ± 10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBRiscontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB	A/D Converter:	24 bit
Visible resolution (in divisions):999999Divisions value (adjustable):x1, x2, x5, x10, x20, x50Decimal figures range:0 ÷ 4Temperature range:-10 ÷ +50°C (max umidity 85% without condensation)Storage temperature:-20 ÷ +60°CFiter:0.1 ÷ 250 HzExcitation voltage:4 Vdc (max 4 -350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic notput:2 optoisolated outputs; max 24 Vdc/100 mA eachStrial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Temperature drift analog output:2 vdv (x10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBDat storage:32 Kbytes expandable up to 1024 Kbytes (optional)	Internal Resolution:	> di 16.000.000 points
Divisions value (adjustable):x1, x2, x5, x10, x20, x50Decimal figures range:0÷4Temperature range:-10÷+50°C (max umidity 85% without condensation)Storage temperature:-20÷+60°CFiter:0.1÷250 HZExcitation voltage:4 Vdc (max 4-350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic output:0.1%E-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Power supply:0.002% FS °CPower supply:ARK Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBDiscontroller:ARK Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB	Frequency signal acquisition:	13 ÷ 1.000 Hz
Decimal figures range:0 ÷ 4Temperature range:-10 ÷ +50°C (max unidity 85% without condensation)Storage temperature:-20 ÷ +60°CFilter:0.1 ÷ 250 HzExcitation voltage:4 Vdc (max 4 -350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:2 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Temperature drift analog output:0,002% FS / °CPower supply:At Vdc ± 10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:32 Kbytes expandable up to 1024 Kbytes (optional)	Visible resolution (in divisions):	999999
Temperature range:       -10 ÷ +50°C (max umidity 85% without condensation)         Storage temperature:       -20 ÷ +60°C         Filter:       0.1 ÷ 250 Hz         Excitation voltage:       4 Vdc (max 4 -350 Ohm- load cells)         Logic output:       2 optoisolated outputs; max 24 Vdc/100 mA each         Logic input:       2 optoisolated inputs 24 Vdc PNP (external power supply)         Serial port:       1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocol         Analog output Non-Linearity:       <0.03%         Temperature drift analog output:       0,002% FS / °C         Power supply:       24 Vdc ±10% - power consumption 5 W         Microcontroller:       ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB         Data storage:       32 kbytes expandable up to 1024 Kbytes (optional)	Divisions value (adjustable):	x1, x2, x5, x10, x20, x50
Storage temperature:-20 ÷ +60°CFilter:0.1 ÷ 250 HzExcitation voltage:4 Vdc (max 4 -350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:2 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Temperature drift analog output:0,002% FS / °CPower supply:24 Vdc ±10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:24 Kbytes expandable up to 1024 Kbytes (optional)	Decimal figures range:	0 ÷ 4
Filter:0.1 ÷ 250 HzExcitation voltage:4 Vdc (max 4 -350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:0 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Power supply:0/02% FS / °CPower supply:2 4 Vdc ±10% - power consumption 5 WMirocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:3 2Kbytes expandable upt 0.1024 Kbytes (optional)	Temperature range:	-10 ÷ +50°C (max umidity 85% without condensation)
Excitation voltage:4 Vdc (max 4 -350 Ohm- load cells)Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:2 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:-0.03%Temperature drift analog output:0.002% FS / °CPower supply:24 Vdc ±10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:32 Kbytes expandable up to 1024 Kbytes (optional)	Storage temperature:	-20 ÷ +60°C
Logic output:2 optoisolated outputs; max 24 Vdc/100 mA eachLogic input:2 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:<0.03%	Filter:	0.1 ÷ 250 Hz
Logic input:2 optoisolated inputs 24 Vdc PNP (external power supply)Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:<0.03%	Excitation voltage:	4 Vdc (max 4 -350 Ohm- load cells)
Serial port:1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocolAnalog output Non-Linearity:<0.03%	Logic output:	2 optoisolated outputs; max 24 Vdc/100 mA each
Analog output Non-Linearity:<0.03%Temperature drift analog output:0,002% FS / °CPower supply:24 Vdc ±10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:32 Kbytes expandable up to 1024 Kbytes (optional)	Logic input:	2 optoisolated inputs 24 Vdc PNP (external power supply)
Temperature drift analog output:0,002% FS / °CPower supply:24 Vdc ±10% - power consumption 5 WMicrocontroller:ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USBData storage:32 Kbytes expandable up to 1024 Kbytes (optional)	Serial port:	1 USB-C device + 1 RS232C + 1 RS485/Fieldbus; ASCII or Modbus RTU protocol
Power supply:       24 Vdc ±10% - power consumption 5 W         Microcontroller:       ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB         Data storage:       32 Kbytes expandable up to 1024 Kbytes (optional)	Analog output Non-Linearity:	<0.03%
Microcontroller:       ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB         Data storage:       32 Kbytes expandable up to 1024 Kbytes (optional)	Temperature drift analog output:	0,002% FS / °C
Data storage:     32 Kbytes expandable up to 1024 Kbytes (optional)	Power supply:	24 Vdc ±10% - power consumption 5 W
	Microcontroller:	ARM Cortex M0 + 32 bit 256KB Flash reprogrammable onboard via USB
Regulatory compliance: EN61000-6-2, EN61000-6-3 for EMC; EN61010-1 for Electrical Safety; EN45501 for Metrology	Data storage:	32 Kbytes expandable up to 1024 Kbytes (optional)
	Regulatory compliance:	EN61000-6-2, EN61000-6-3 for EMC; EN61010-1 for Electrical Safety; EN45501 for Metrology







All indicated data may be changed without notice.

## **PAVONE SISTEMI S.R.L.**

Via Tiberio Bianchi 11/12/13, 20863 Concorezzo (MB), Milan, Italy T (+39) 039 9162656 F (+39) 039 9162675 W pavonesistemi.com Industrial Electronic Weighing Systems since 1963