

Technical description/Datasheet

WeST2301

Industrial Edge System based on Raspberry Pi Pico

Produkt type: control unit
Model name: WeST2301

Manufacturer: Weiß Elektronik und Software GmbH
 Lauchdorfer Str. 6-8
 87782 Unteregg/Warmisried
 Germany



Description: The WeST2301 control unit is based on the Raspberry Pi Pico RP2040 microcontroller and a self-developed baseboard, which has a 6V - 36V power supply, CAN, Ethernet (W6100 Hardwired TCP/IP CHIP), analog and digital inputs, as well as 2 DC motor full bridges. The Ethernet and CAN interfaces make it easy to connect to networks. WeST2301 can be freely programmed via C and MicroPython.

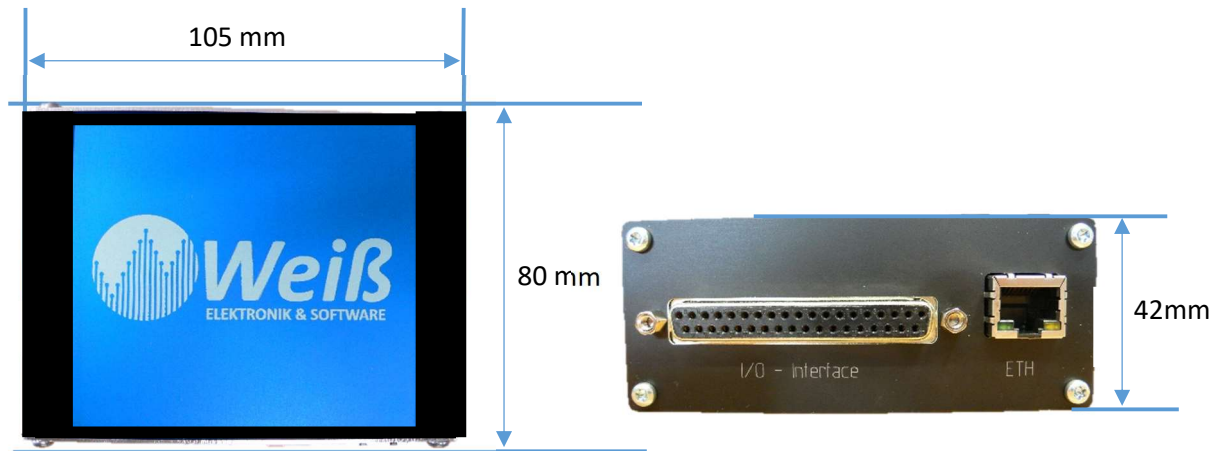
Technical description:

- Supply voltage: 6V ... 36V DC
- Temperature range: -20°C ... +80°C
- CAN 2.0 Interface
- Ethernet (W6100 Hardwired TCP/IP CHIP)
- 7 analog Inputs
- 4 PWM-/ digital- Inputs
- 2 DC motor full bridge drivers (5.6A OUTPUT PEAK CURRENT (2.8A DC))
- Freely programmable via C and MicroPython
- Dimensions: about 105 mm x 80 mm x 42mm
- Weight: about 200 g
- Standards: CE

Pin assignment Sub-D 37

Pin	Description
1	Full Bridge M1 (+)
2	Full Bridge M2 (+)
3	Full Bridge M2 (-)
4	Full Bridge M1 (-)
5	Full Bridge M3 (+)
6	Full Bridge M4 (+)
7	Full Bridge M4 (-)
8	Full Bridge M3 (-)
9	+12V ... +24V Supply Full Bridge M3 and M4
10	0-5V analog IN 1 (Low pass filter $F_g= 33\text{Hz}$)
11	0-5V analog IN 2 (Low pass filter $F_g= 33\text{Hz}$)
12	0-5V analog IN 3 (Low pass filter $F_g= 33\text{Hz}$)
13	0-5V analog IN 4 (Low pass filter $F_g= 33\text{Hz}$)
14	0-5V analog IN 5 (Low pass filter $F_g= 33\text{Hz}$)
15	0-5V analog IN 6 (Low pass filter $F_g= 33\text{Hz}$)
16	0-5V analog IN 7 (Low pass filter $F_g= 33\text{Hz}$)
17	PWM-IN1
18	PWM-IN2
19	Digital IN 1
20	+12V Supply WeST2301 and Full Bridge M1 and M2
21	+12V OUT
22	+12V OUT
23	+12V OUT
24	+5V OUT
25	+5V OUT
26	+5V OUT
27	+5V OUT
28	Digital IN 2
29	CAN H
30	CAN L
31	GND
32	GND
33	GND
34	GND
35	GND
36	GND
37	GND

Dimensions:



Contact:



Weiß Elektronik und Software GmbH
Lauchdorfer Str. 6-8
87782 Unteregg/Warmisried
Tel. +49 (0) 8269 1474 Fax. +49 (0) 8269 960774
EMail: info@weiss-elektronik.de
HRB 5783 Amtsgericht Memmingen
Geschäftsführer: Dipl.-Ing. (FH) Gerhard Weiß