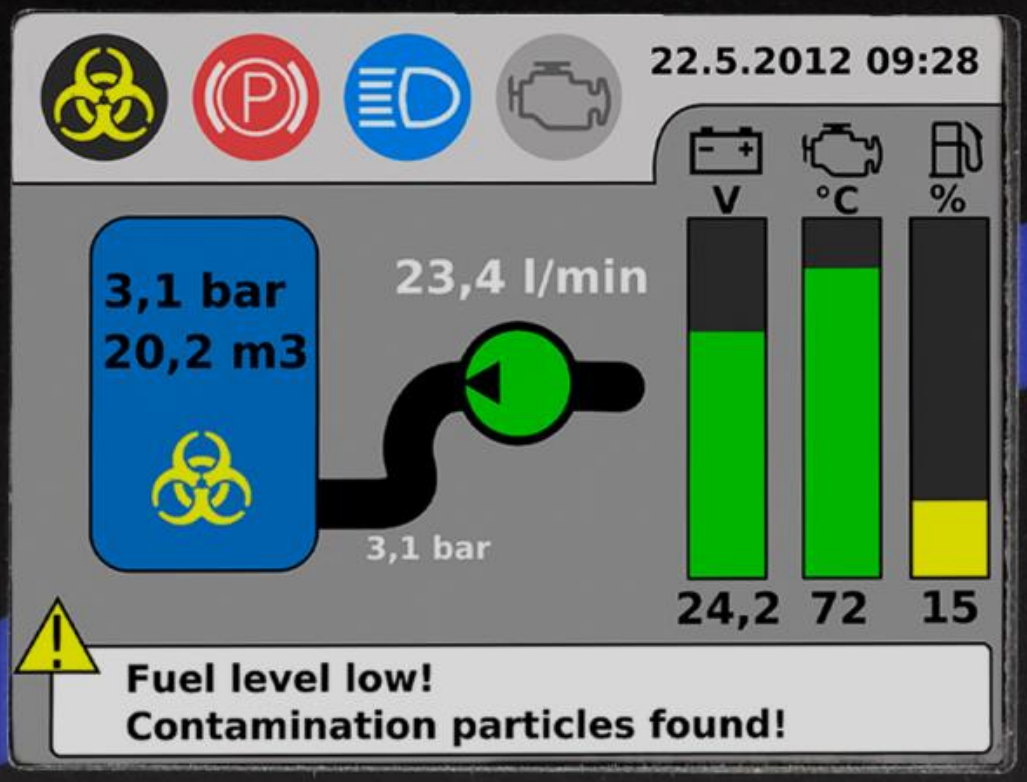


CCD1200S

Preliminary Technical Data Sheet

CCD1200S Compact Controller with Display

- 4 Buttons
- 3.5” colour TFT
- 38 configurable I/O
- Programmable via Guitu
- Designed for operation at both 12V DC and 24V DC
- Real Time Clock
- Bluetooth

CCD1200S is compact and versatile I/O controller equipped with information display. It has 38 configurable I/O lines.

The unit has a built in Real Time Clock, which can be used for logging events with a time stamp. In addition to flash there is also battery backed memory for storing fast changing information.

The unit has built-in Bluetooth and as an option it can be equipped with an additional RF interface (WiFi/GPS/4G).

Technical Information

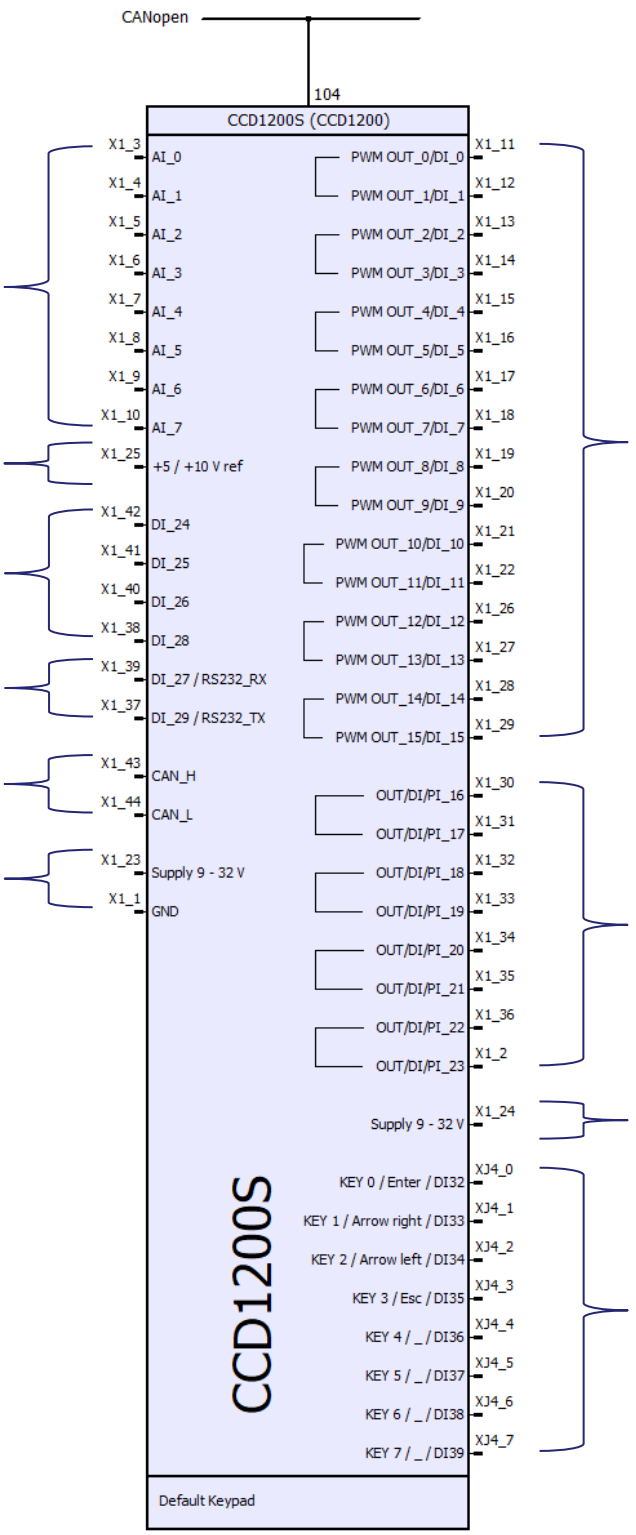
- 9-32V DC Operating voltage range
  (Protected against reverse polarity)
- -30…+70°C operating temperature range
- -30…+80°C storage temperature range
- 3.5” TFT colour display (Resolution QVGA, 320x240)
- 32-bit microprocessor
- 512 kB RAM
- 2 MB flash memory
- 84 B battery backed memory
- IP67 aluminium housing
- Weight 0.7kg
- Main dimensions 127mm x 146mm x 37mm
- One 44 pin AMP Super Seal connector
- CAN Interface 2.0B, ISO 11898
- Serial port interface RS232
- Real time clock (RTC)
- Bluetooth 4.1, BLE
- Optional radio frequency interface

I/O Interface

- Total of 38 configurable IO-lines
- Separate supply for outputs and electronics
- The I/O interface is protected against short to GND and to supply voltage
- Configurable reference voltage: 5V / 10V, max 250mA

Amount	Configurability	Details
4	Digital input	Low<3.5V, High>5V, max 100Hz
8	Digital input Analog input	Low<3.5V, High>5V, max 100Hz 12-bit AD conv., 0-10.4V, 69kΩ 0-22mA, 150Ω
8	Digital input Frequency/pulse input Digital output PWM output	Low<3.5V, High>5V, max 100Hz Low<3.5V, High>5V, max 20kHz High side switch, max 3A High side switch, max 3A
16	Digital input Digital output Current controlled PWM output	Low<3.5V, High>5V, max 100Hz High side switch, max 3A High side switch, max 3A
2	Digital inputs RS232 interface	Low<3.5V, High>5V, max 100Hz ! Note: Max 15V

Wiring Diagram:



Analog inputs
12-bit resolution
Overload protection
0-10.4V / 0-22mA
or
Digital inputs
or
Node ID selection
only AI_7

Reference voltage out
250mA

Digital inputs

Digital inputs
or
RS232
Note! Maximum 15V

ISO high speed CAN

Supply for electronics
1A fuse recommended

Digital outputs
High side driver, Max 3A
or
PWM outputs
with currents measurement
High side driver, Max 3A
or
Digital inputs

Digital outputs
High side driver, Max 3A
or
PWM outputs
High side driver, Max 3A
or
Digital inputs
or
Frequency/pulse inputs

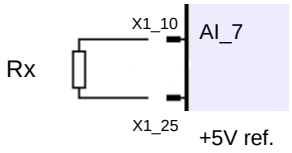
Supply for outputs
Max 10A fuse

Fascia label buttons
default 4 buttons
(These are internal inputs designed for reading fascia label buttons)

Node ID

As default the unit Node address is set by voltage level at AI_7.

Voltage at AI_7	Node ID offset	Rx / Ω
0V	1	open
0.9V	9	330k
1.7V	3	150k
2.6V	11	68k
3.5V	5	33k
4.3V	13	11k
5.2V	7	0



Node ID = Base Node ID (103) + Node ID offset

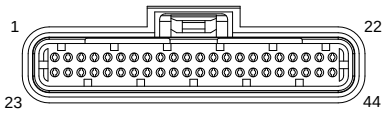
See also product's CANopen profile for further details.

Connector

Tyco Electronics Superseal Connector

	Connector components needed:
Superseal Connector Plug Housing	Ø1.6-2.2mm - AMP 1376886-1 Ø 2.0-2.4mm - AMP 2-1447232-6
Receptacle Contact (0.75 – 1.25mm^2)	AMP 3-1447221-3
Filler Plug *)	AMP 4-1437284-3 Deutsch 0413-204-2005

*) Filler plugs must be used to reach waterproofness



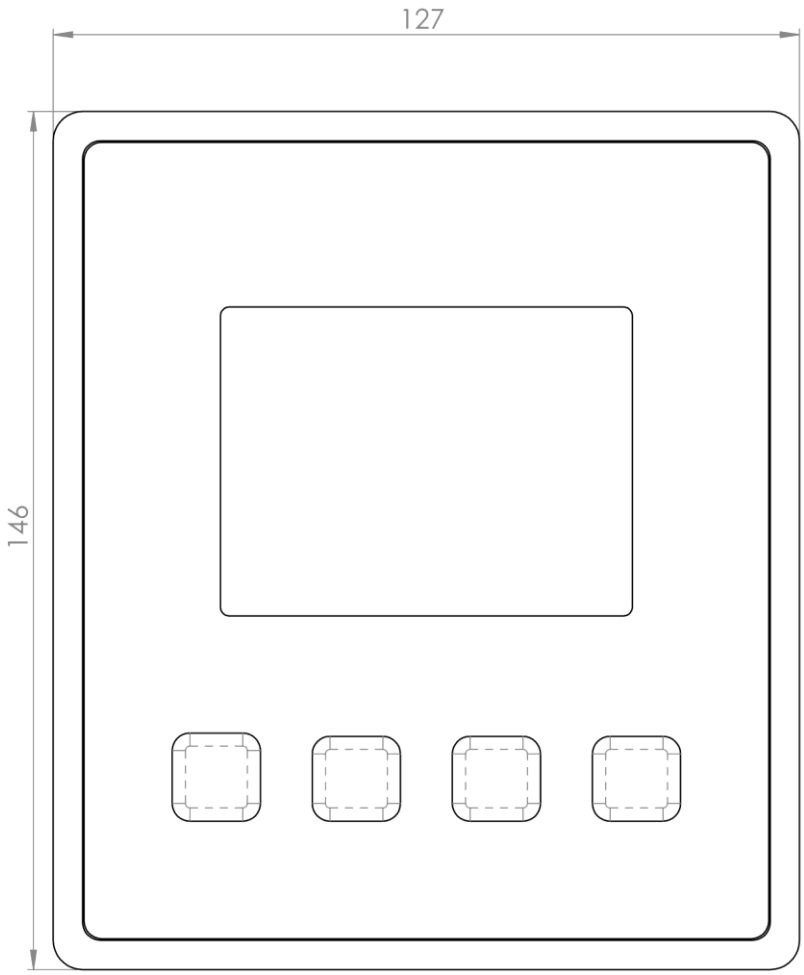
As seen from cable entry side

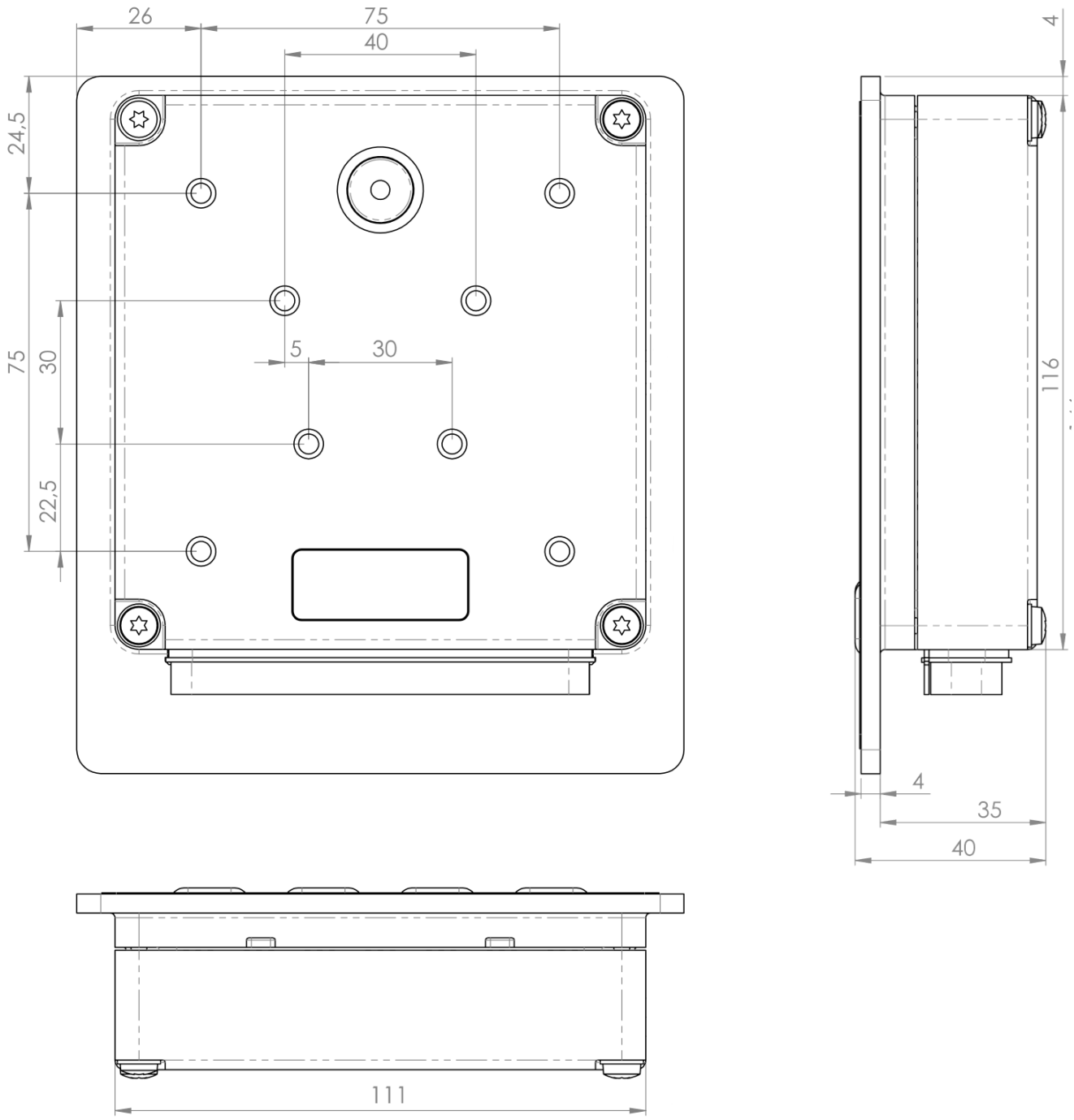
Tests & CE compliance

EMC	EN 61000-4-2, Testing and measurement techniques – Electrostatic discharge immunity test E/ECE Regulation No. 10, Revision 4 (2012), Emission and immunity tests IEC 60255-22-1, Electrical disturbance tests for measuring relays and protection equipment – 1 MHz burst immunity test
Environmental	EN 60068-2-1, Cooling test IEC 60068-2-2, Dry heat test IEC 60068-2-30, Damp heat test EN 60068-2-6, Stationary vibration EN 60068-2-27, Mechanical shock test IEC 60529, IP6X dust test IEC 60529, IPX7 temporary inversion test to 1m ISO 9227, Salt spray test

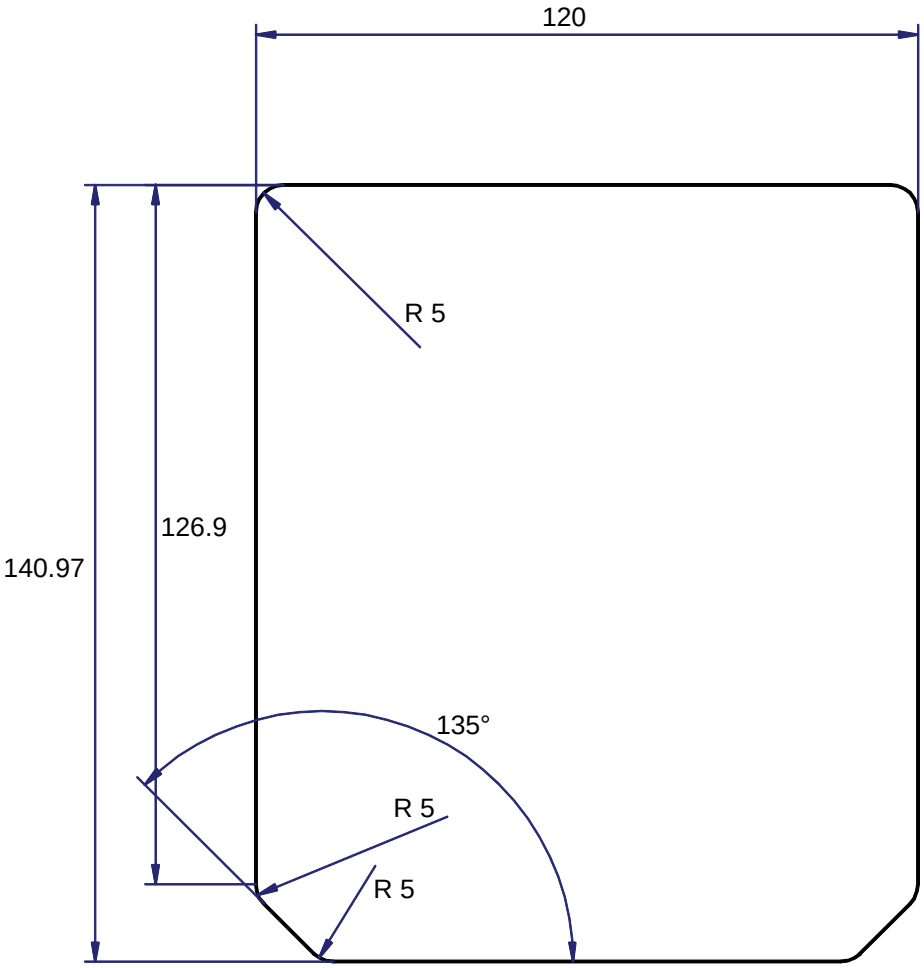
Housing Dimensions

CCD1200S is prepared for panel mounting and for widely used RAM-mount system. With panel mounting panel max thickness is 2 mm.

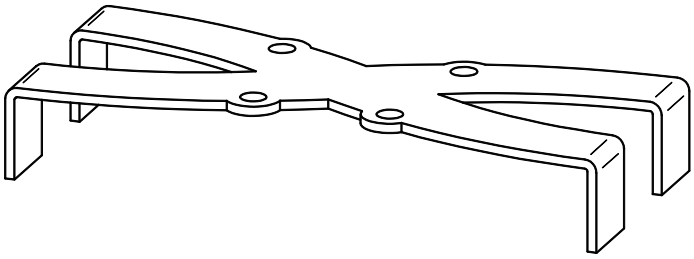



26
75
40
24,5
75
30
22,5
5
30
4
116
4
35
40
111

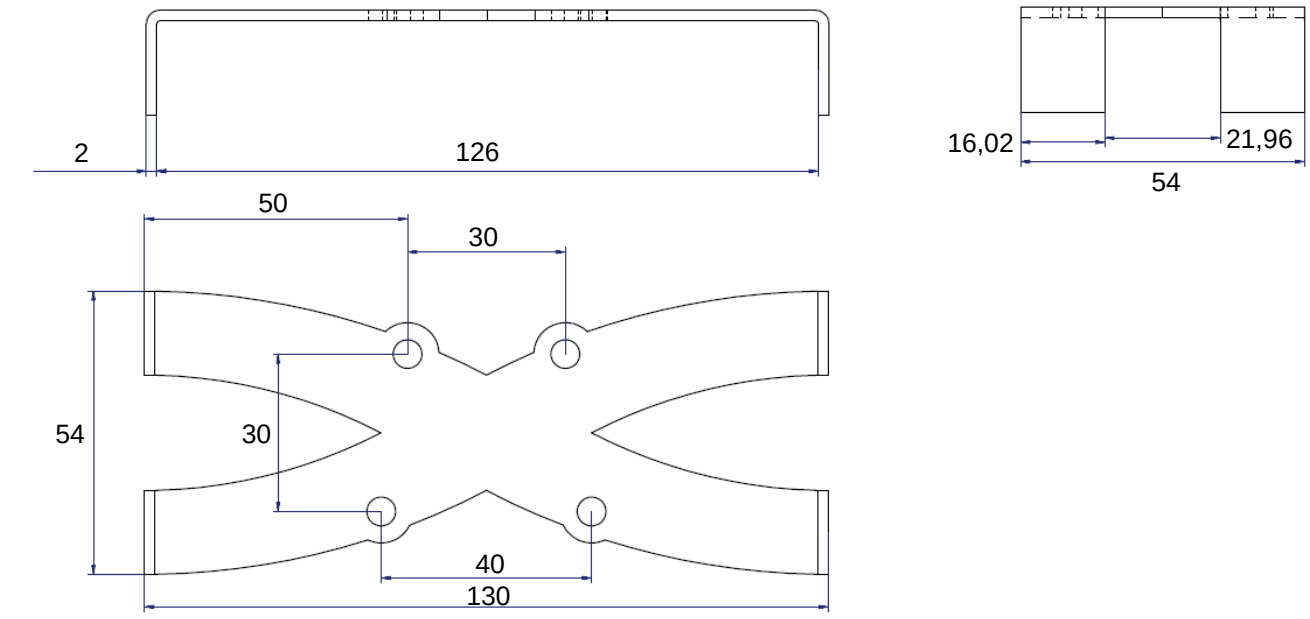
Panel Mounting Hole Dimensions:



Panel Mounting Bracket - Optional



Panel Mounting Bracket dimensions



Exertus reserves the right to change product details without prior notice