

Mini Comms Hub Lite Datasheet



The “Mini Comms Hub Lite” or MCHL allows complex communications between non-compatible CAN devices. It features twin Ethernet, a fully flexible CAN bus and real-time maths capability as well as 4 physical inputs and standalone logging as standard (with or without a Life Racing ECU).

The MCHL device is available in two variants: MCHL-T (Top side connector) and MCHL-E (End side connector). Ordering information and dimension differences detailed below.

Processing:

- Powerful RISC CPU for advanced strategy execution
- Real time maths up to 8000 operators a second

Inputs:

- 4 user configurable general purpose analogue sensor inputs

Interfaces:

- Twin 100 MHz full duplex Ethernet for calibration, configuration and ECU streaming
- Twin CAN 2.0B interface with fully flexible CAN configuration
- RS232 serial interface

Memory:

- 1GB onboard logging memory either standalone or streaming from an LR ECU

Power Supply:

- 8V to 80V input voltage range with reverse polarity protection
- Regulated 5V sensor supply output

Physical:

- 1x Deutsch Autosport 22 pin connector
- CNC machined, black anodised aluminium case
- Maximum dimensions including the connectors are:
 - MCHL-T: 113 x 87.5 x 42.55 mm
 - MCHL-E: 126.3 x 87.5 x 34.75 mm
- Total mass is ~225 grams

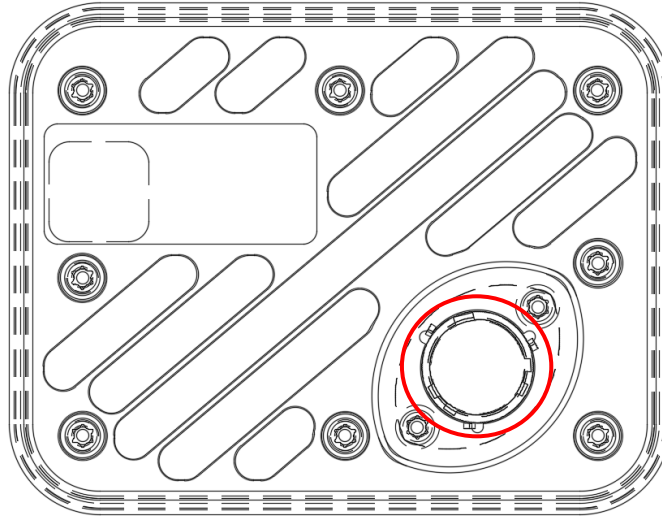
Ordering Information:

Description	Part number
Mini Comms Hub Lite - Top side connector (MCHL-T)	ANC-A08
Mini Comms Hub Lite – End Side connector (MCHL-E)	ANC-A10
MCHL-T/E Connector Kit	CON-A19

Wiring Information:

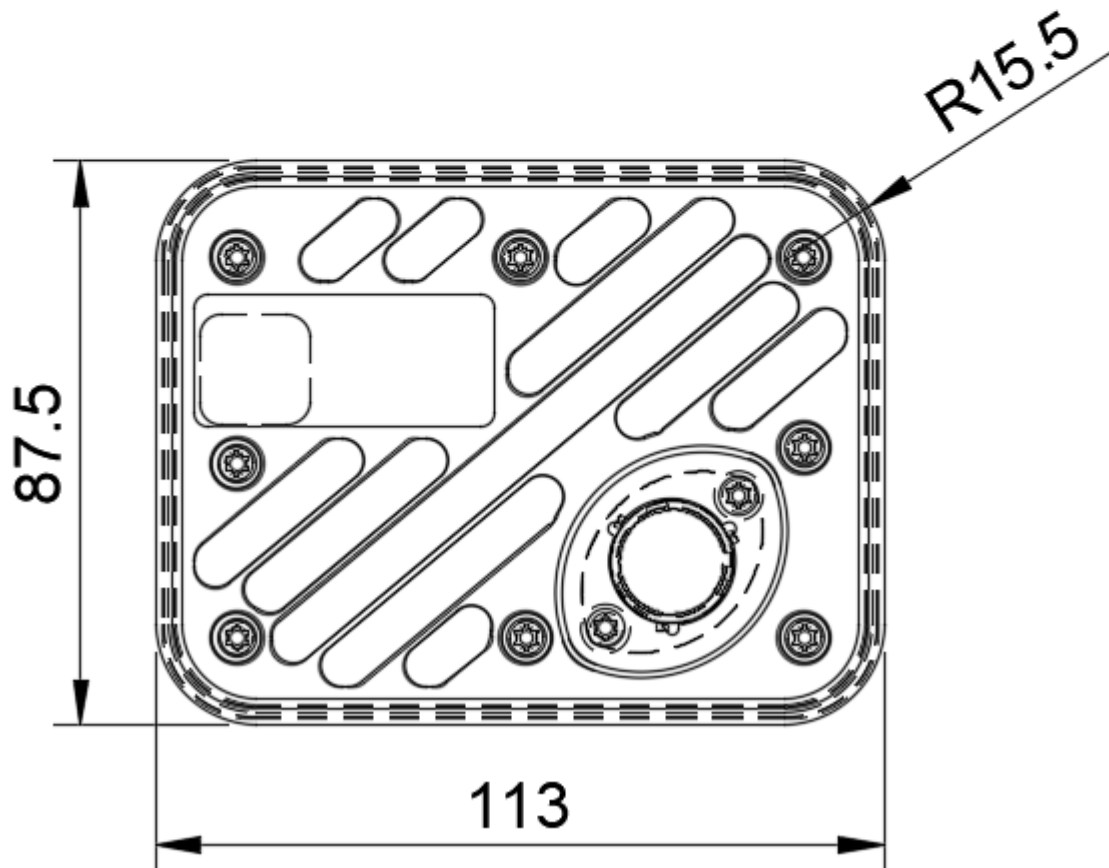
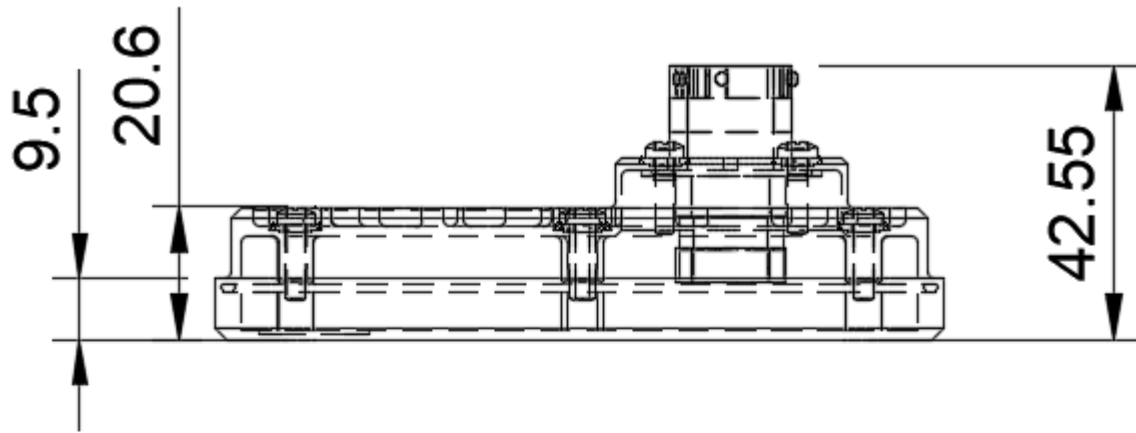
Connector 1

Mating connector: AS612-35PN

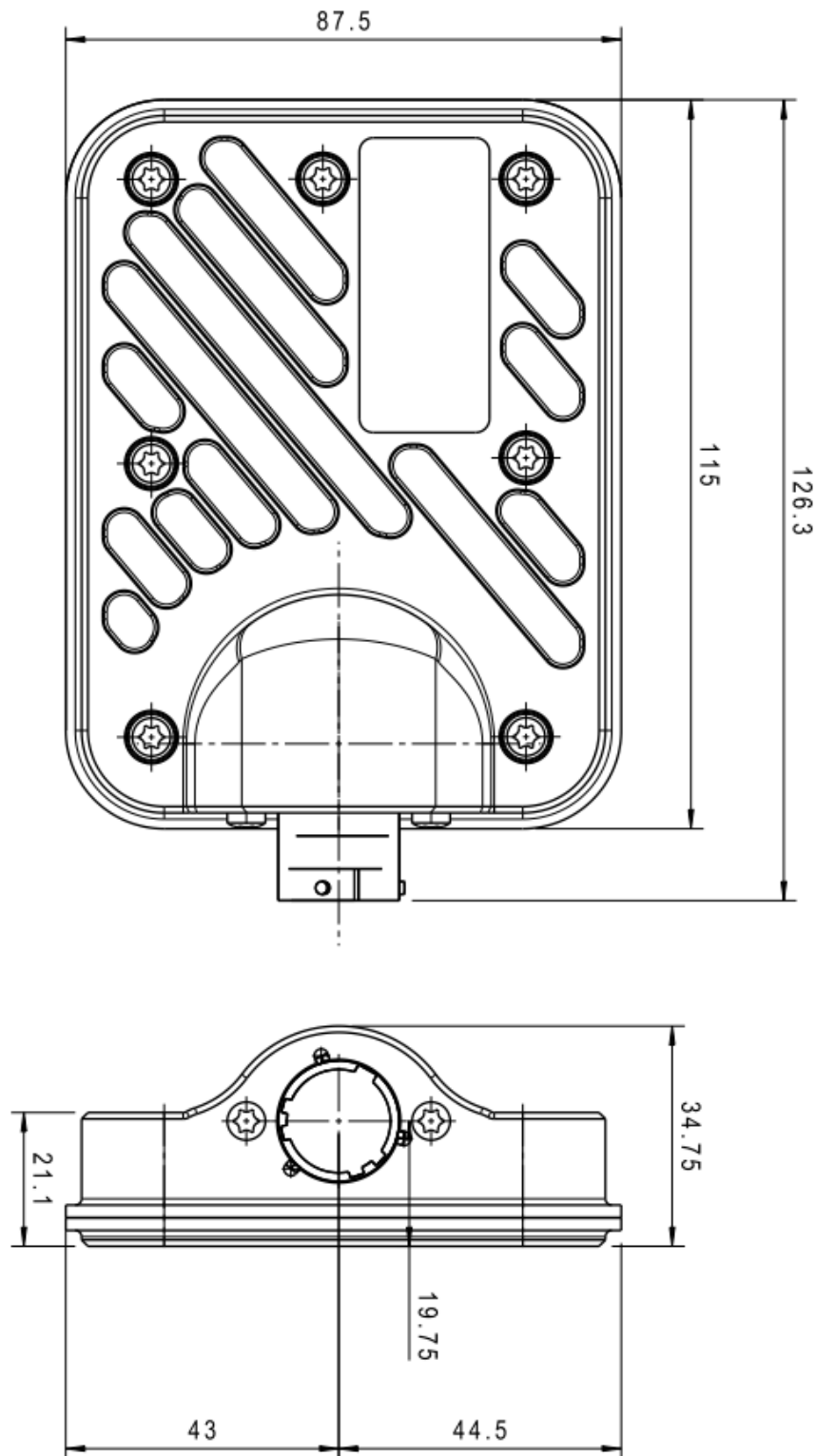


Pin	Gauge	Signal Name	Signal Notes
1	22-26 AWG	MCHL +12V	Positive power supply
2	22-26 AWG	MCHL GND	Negative power supply
3	22-26 AWG	CAN #01 HI	CAN Communication Port
4	22-26 AWG	CAN #01 LO	CAN Communication Port
5	22-26 AWG	CAN #02 HI	CAN Communication Port
6	22-26 AWG	CAN #02 LO	CAN Communication Port
7	22-26 AWG	ETHERNET1 TX-	Ethernet Communication Port
8	22-26 AWG	ETHERNET1 TX+	Ethernet Communication Port
9	22-26 AWG	ETHERNET1 RX-	Ethernet Communication Port
10	22-26 AWG	ETHERNET1 RX+	Ethernet Communication Port
11	22-26 AWG	ETHERNET2 TX-	Ethernet Communication Port
12	22-26 AWG	ETHERNET2 TX+	Ethernet Communication Port
13	22-26 AWG	ETHERNET2 RX-	Ethernet Communication Port
14	22-26 AWG	ETHERNET2 RX+	Ethernet Communication Port
15	22-26 AWG	RS232 RX	RS232 receive
16	22-26 AWG	RS232 TX	RS232 transmit
17	22-26 AWG	5V OUT	Regulated 5V sensor supply
18	22-26 AWG	ANA GND	Protected sensor ground
19	22-26 AWG	INPUT #01 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
20	22-26 AWG	INPUT #02 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
21	22-26 AWG	INPUT #03 (5V/TH)	Analogue input 0-5v, 3K software pullup to 5V
22	22-26 AWG	INPUT #04(5V/TH)	Analogue input 0-5v, 3K software pullup to 5V

MCHL-T Dimensions:



MCH-E Dimensions:



Warranty and Servicing:

- 1 year limited warranty when used within supplied specification.