

HCM3210S



- 20 Configurable I/Os
- CAN bus
- RS232
- Designed for 12 VDC and 24 VDC

HCM3210S Hybrid Controller Module features 20 configurable I/O lines in a small cost-efficient package. It is typical used as remote node in tough environment.

Technical Information

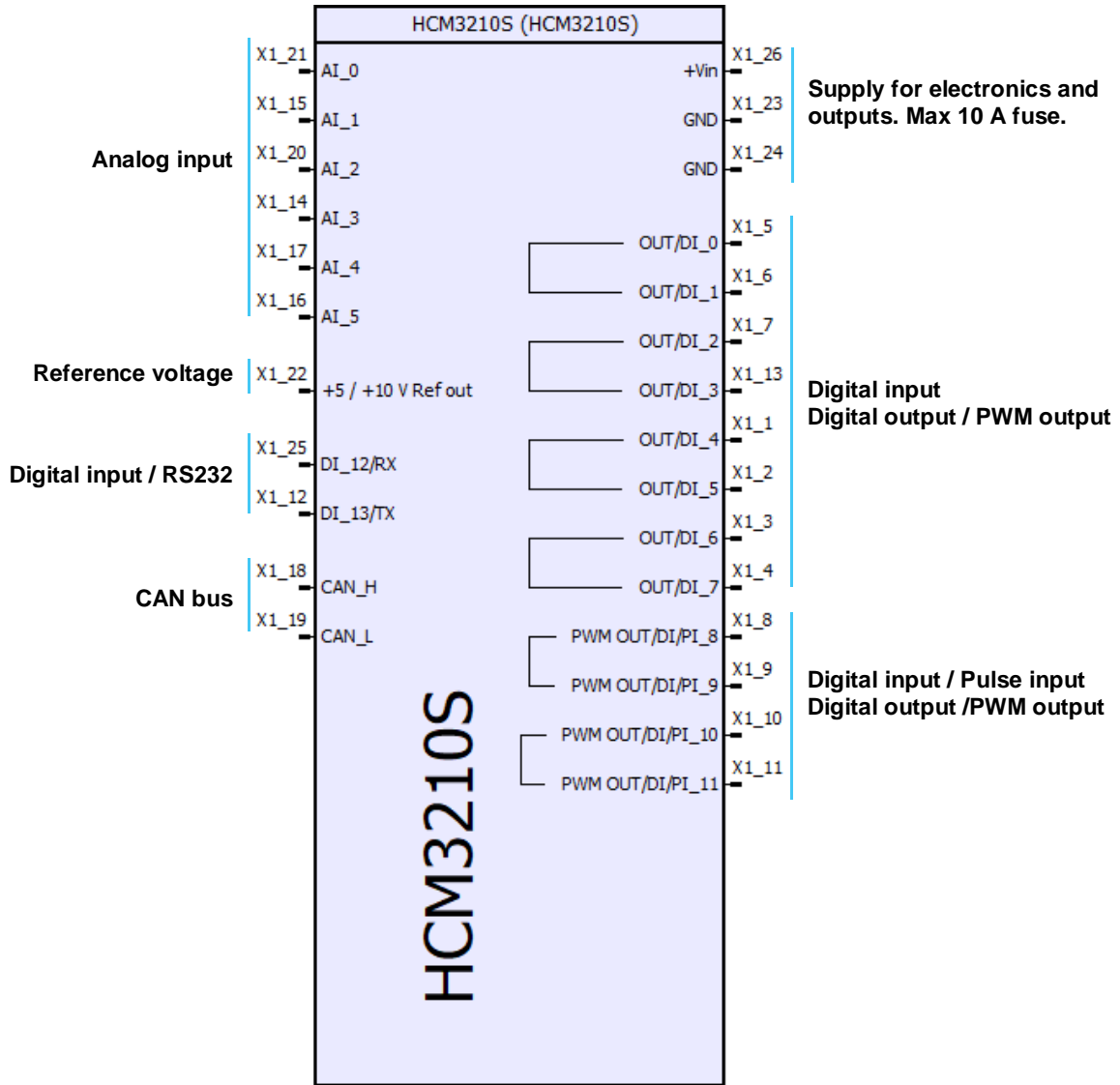
- 9-32V operating voltage range
(Protected against reverse polarity)
- Less than 100mA current consumption at no load
- -40...+85°C operating temperature range
- 32-bit microprocessor
- IP67 aluminium housing
- Weight 0.6kg
- Main dimensions 112mm x 102mm x 34mm
- CAN Interface 2.0B, ISO 11898
- RS232 interface

I/O Interface

- 20 Configurable I/O-lines
- The I/O interface is protected against short to GND and to supply voltage
- CAN bus
- RS232
- Configurable reference voltage: 5V / 10V, max 250mA

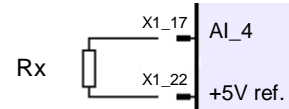
Amount	Configurability	Details
8	Digital input Digital output PWM output	Low < 2 V, High > 6,5 V, max 100 Hz High side driver, max 3 A High side driver, max 3 A
6	Digital input Analog input	Low < 1,5 V, High > 3,2 V, max 100 Hz 12-bit AD-conversion 0-10,3 V, 69 kΩ 0-22 mA, 150 Ω
4	Digital input Pulse input Digital output PWM output	Low < 2 V, High > 6,5 V, max 100 Hz Low < 2 V, High > 6,5 V, max 8 kHz High side driver, max 3 A High side driver, max 3A
2	Digital input RS232	Low < 2 V, High > 6,5 V, max 100 Hz

Wiring Diagram



Node ID

Voltage at AI_4	Node ID offset	R (with 5 V ref)
0V	1	Open
1.7V	3	150 kΩ
3.5V	5	33 kΩ
5.2V	7	Closed



As default the unit's node address is set by voltage level at AI_4.

Node ID = Base Node ID (32) + Node ID offset. See CANopen profile for further details.

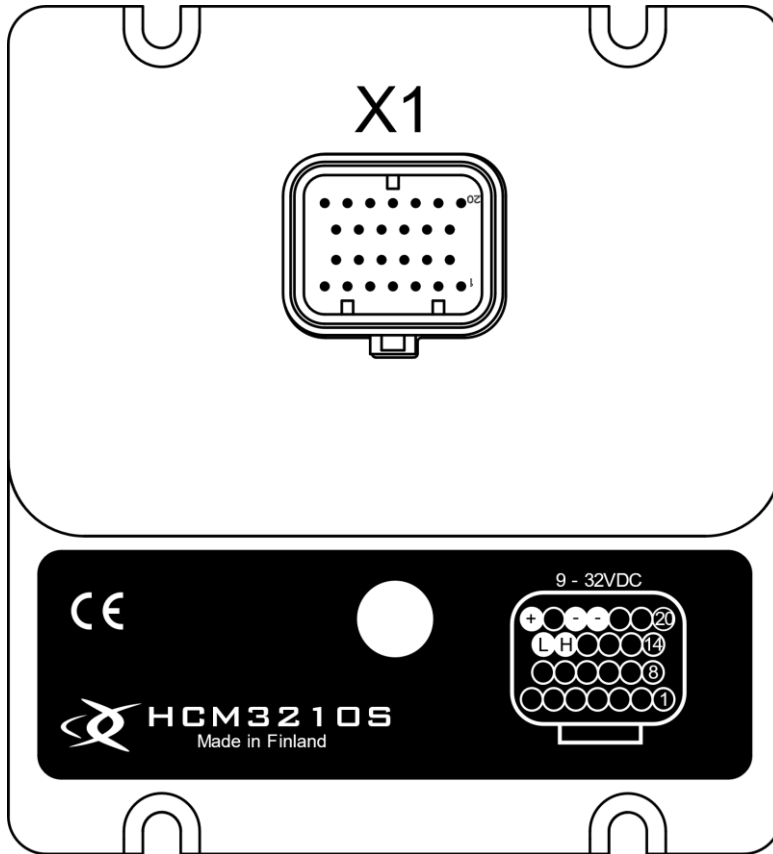
Quadrature encoders

In HCM3210S there are two separate quadrature encoders. Quadrature input signals (pairs) are compared to each other and with that information module is able to know direction.

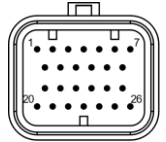
Available pins are:

Pair	Pin A	Pin B
1	X1_8	X1_9
2	X1_10	X1_11

Connector



X1

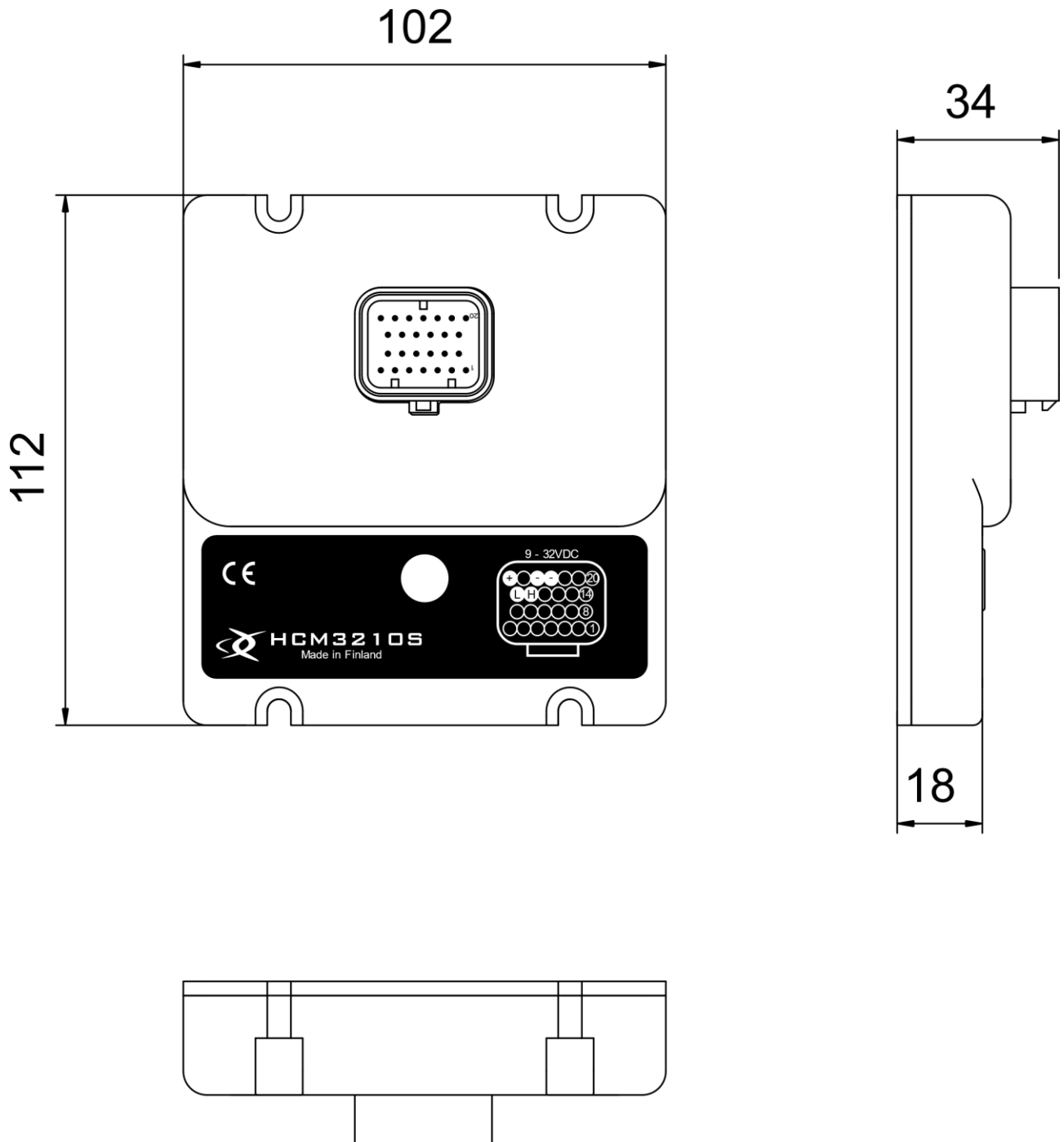


As seen from cable entry side

Superseal connector

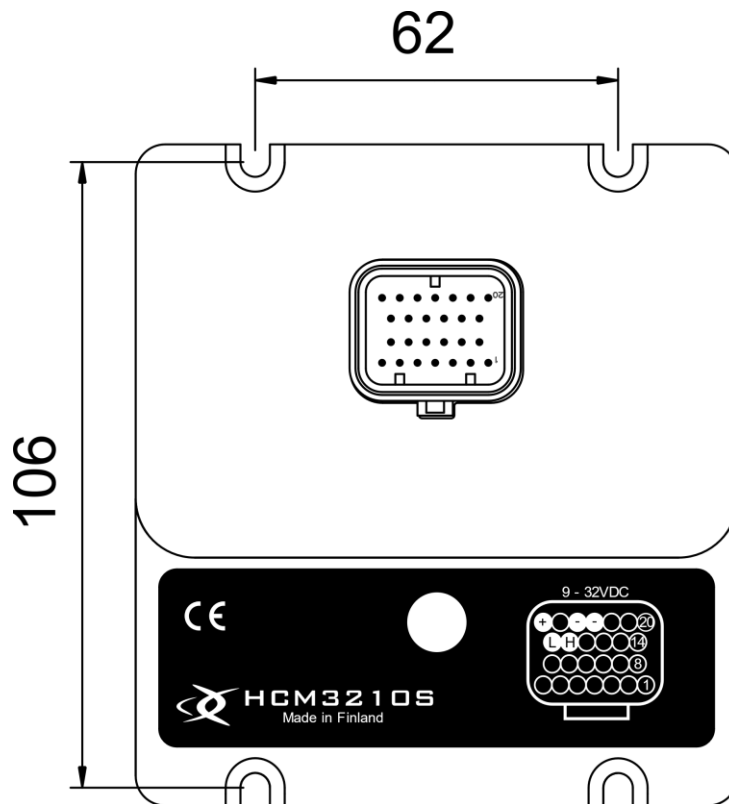
Superseal connector needed:	
X1 : Super Seal Connector Plug Housing	Ø1.6 - 2.2 mm - AMP 3-1437290-7
Receptacle Contact (0.75 – 1.25mm ²)	AMP 3-1447221-3
Filler Plug *)	AMP 4-1437284-3 Deutsch 0413-204-2005

*) Filler plugs must be used on empty cavities to reach waterproofness

Dimensions

Mounting

HCM3210S is mounted on a flat surface with four M5 screws.



The preferred mounting position is connectors pointing downwards. If the unit is mounted connectors pointing to the side, then it is vital to leave some loose cable with a downward cue to prevent the ingress of moisture through connector.

