



**CCM1100S**

*Technical Data Sheet*



## CCM1100S Compact Controller Module



- 38 configurable I/O
- Programmable via Guitu
- Designed for operation at both 12V DC and 24V DC
- Real Time Clock

CCM1100S 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.

As an option the unit can be equipped with a RF interface (for instance for remote control).

## Technical Information

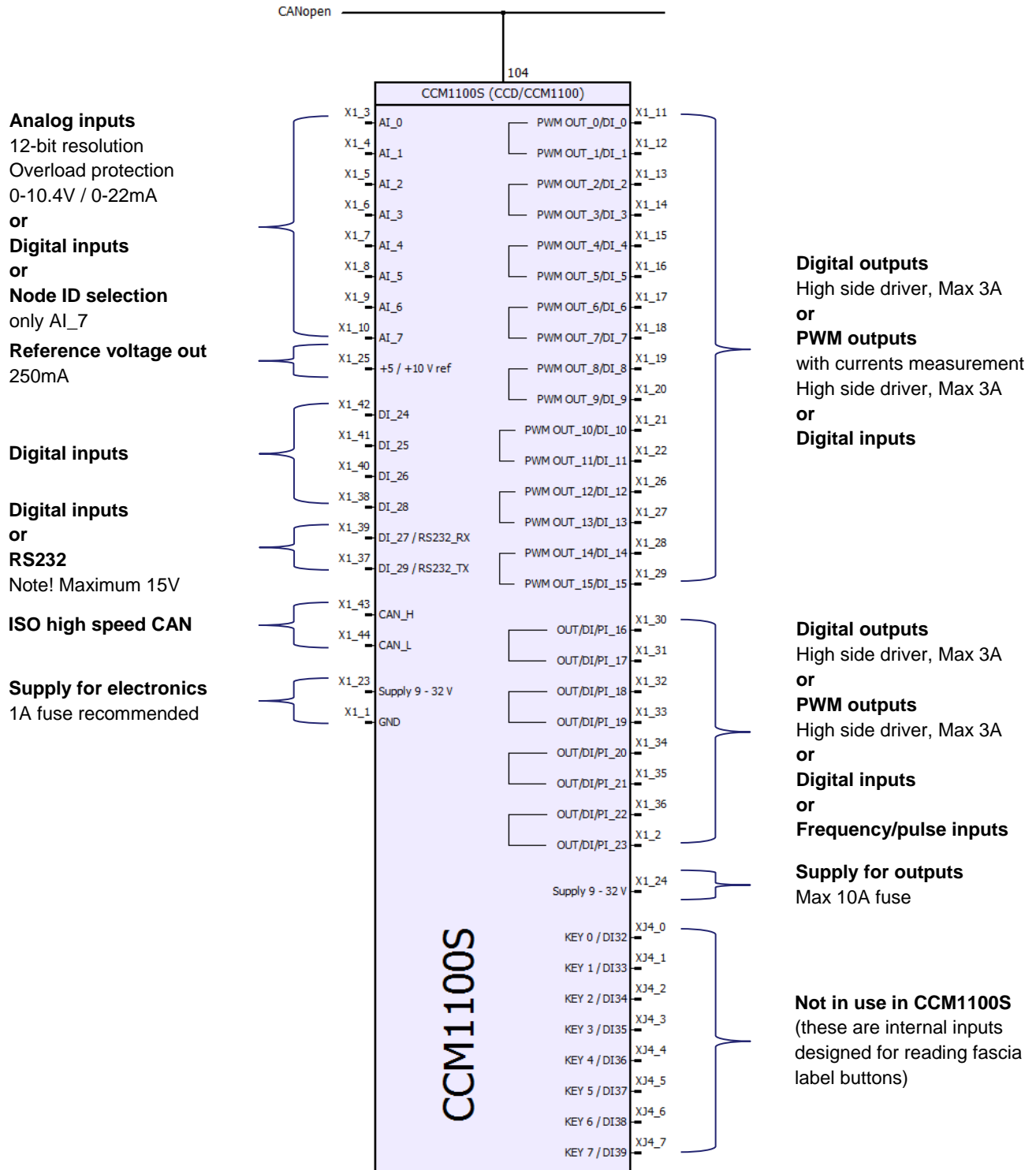
- 9-32V DC Operating voltage range  
(Protected against reverse polarity)
- -40...+85°C operating temperature range
- 32-bit microprocessor
- 96 kB RAM
- 1MB flash memory
- 84B battery backed memory
- IP67 aluminium housing
- Weight 0.7kg
- Main dimensions 127mm x 146mm x 37mm
- One 44 pin AMP Super Seal connector
- CAN Interface 2.0B, ISO 11898
- Serial port interface RS232
- Real time clock (RTC)
- 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

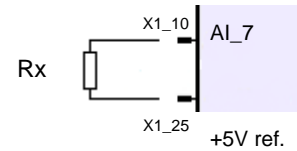
# Wiring Diagram:



## Node ID

As default the unit Node address is set by voltage level at AI\_7.

Voltage at AI_7	Node ID offset	Rx / $\Omega$
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

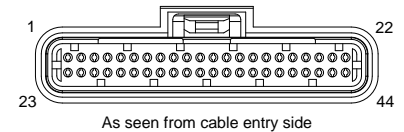
See also relevant CANopen profile for further details.

## Connector

Tyco Electronics Superseal Connector

Connector components needed:	
Super Seal 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 <sup>2</sup> )	AMP 3-1447221-3
Filler Plug *)	AMP 4-1437284-3 Deutsch 0413-204-2005

\*) Filler plugs must be used to reach waterproofness

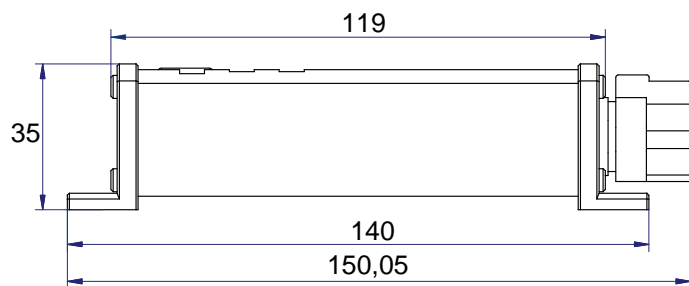
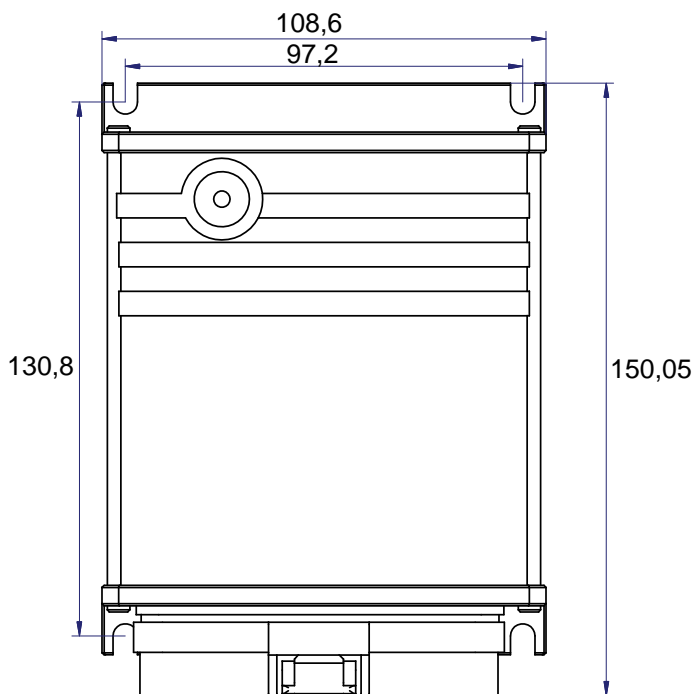


## Tests & CE compliance

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 and Mounting

CCM1100S is fixed to flat surface with four M5 screws. The recommended mounting position is AMP connector facing down or to the side. In latter case it is recommended to leave some loose cable hanging in downward arc to prevent any moisture from accessing the module through the connector.



Exertus reserves the right to change product details without prior notice.