

# CDC2000X Compact Display Controller



- 3.5" colour TFT
- 33 configurable I/O
- Programmable via Guitu
- Designed for operation at both 12 V and 24 V
- Real Time Clock
- 2 CAN interfaces
- USB interface
- Serial Port (RS232)
- 11 programmable buttons

CDC2000X is a compact display and I/O controller in a small and robust package.

The unit has in small package quite rich set of interfaces such as RTOS (real time operating system), two CAN interfaces, RS232 and USB port. RTOS allows setting priorities so that one can be sure that important tasks are executed timely. The built-in Real-Time Clock allows logging events with a time stamp.

The unit has plenty of memory and it can take any role in a system from CAN NMT Master to secondary display.

The built-in alarm clock feature of RTC can be used for example to switch on the engine preheating system.



### **Technical Information**

- 8-32 V Operating voltage range (Protected against reverse polarity)
- -30...+70 °C operating (surface) temperature range
- -40...+80 °C storage temperature range
- 3.5" TFT colour display (QVGA Resolution 320x240)
- 50° Viewing angle
- 32-bit microprocessor
- 8MB RAM, 32 MB flash memory
- IP67 aluminium housing
- Weight: 0.95 kg
- Main dimensions 250 mm(w) x 80 mm(h) x 41 mm(d)
- Two 26 pin AMP Super Seal connectors
- CAN Interface 2.0B, ISO 11898
- Serial port interface RS232
- Real time clock (RTC)

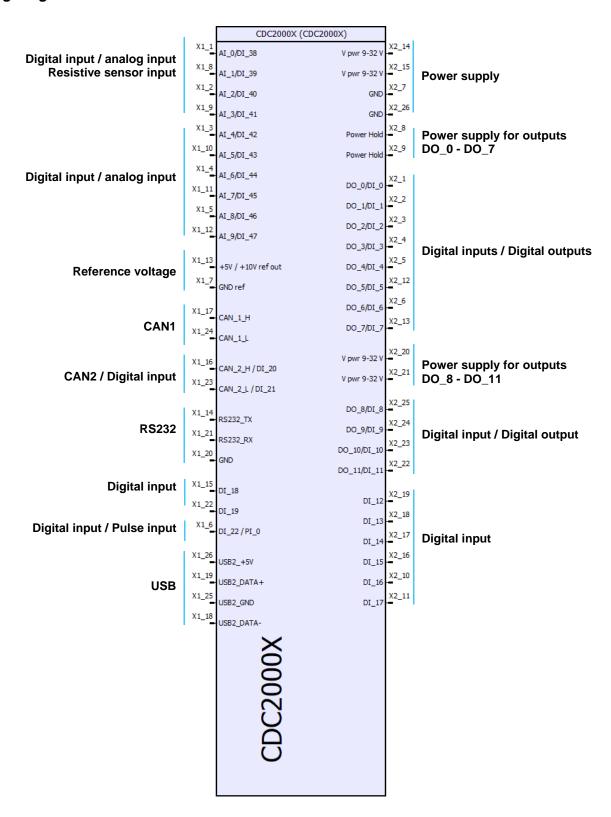
#### I/O Interface

Configurable reference voltage, max. 150 mA

Amount	Configurability	Details
12	Digital input Digital output PWM output	PNP-type. Low < 2 V, High > 6,5 V, max 100 Hz High side driver, max 3 A High side driver, max 3 A
10	Digital input	NPN-type. Low < 3.5 V, High > 4,7 V, max 100 Hz
6	Digital input Analog input	PNP-type. Low < 1,6 V, High > 3,1 V, max 100 Hz 12-bit A/D conv. 0-10,35 V, 69kΩ
1	Digital input Analog input Fuel level sensor input	PNP-type. Low < 1,6 V, High > 3,1 V, max 100 Hz 12-bit A/D conv., 0-10,35 V, $69k\Omega$ 0-250 $\Omega$
3	Digital input Analog input Resistive sensor input	PNP-type. Low < 1,6 V, High > 3,1 V, max 100 Hz 12-bit A/D conv 0-10,35 V, 69kΩ Std. Pt1000 sensor

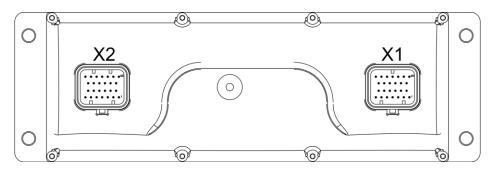


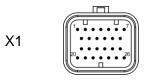
## **Wiring Diagram**





## **Connectors**









As seen from cable entry side

# **Superseal connectors**

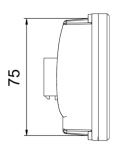
#### Superseal connector needed:

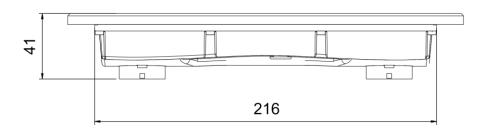
X1: Super Seal Connector Plug Housing	Ø1.6 - 2.2 mm - AMP 3-1437290-7
X2: Super Seal Connector Plug Housing	Ø1.6 - 2.2 mm - AMP 3-1437290-8
Receptacle Contact (0.75 – 1.25mm²)	AMP 3-1447221-3
Filler Plug *)	AMP 4-1437284-3
	Deutsch 0413-204-2005

<sup>\*)</sup> Filler plugs must be used on empty cavities to reach waterproofness

### **Dimensions**







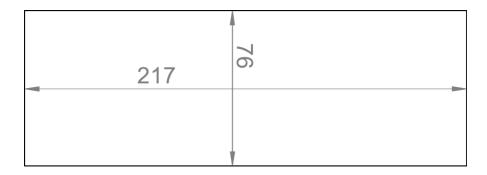


## **Mounting**

CDC2000X is recommended to install on a panel.



## Recommended opening for panel assembly



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.

