

Technical data



3.5 INCH
DISPLAY



750 NIT
DISPLAY



130° /
110°
VIEWING



320
x 240
RESOLUTION



IP 67



+ 70°
- 40°
OPERATING
TEMP



7 X ANALOG
INPUT



2 X DIGITAL
INPUT



ETHERNET*



1 X
PORTS



4 X RELAY
OUTPUTS



1 X RS232



2 X CAN



1 X TACHO
INPUT

C3

3.5" COLOR DISPLAY

C3, FORMERLY THE VEECAN™ 320, IS THE FULL VARIANT IN THE RANGE OF 3.5" COMPACT COLOR CAN BUS DISPLAYS.

The C3 has a 3.5inch color LCD with fully integrated input and output features. One of our most popular displays, it is available in 4 variants with low profile, reduced I/O combinations and low voltage to act as a controller during low voltage events. The display is part of the family of compact, flexible, and rugged CAN bus monitors.

With 7 analog inputs, 4 relay outputs combined with 2 digital inputs, 1 tachometer input, 2 CAN input connections, plus a USB port the C3 allows maximum function.

The QVGA color display can be viewed in full sunlight, the unit is totally sealed and electronically extremely durable. The display can provide system control functions, alarm functionality, and has configurable data logging capability.

It is equipped to meet the challenge of providing tough, flexible, maintenance free instrumentation in even the harshest of environments.

Using the powerful Freescale iMX 286 ARM processor running Linux, programmers can quickly put together a project using our proprietary software developer's kit (SDK) and the proven Veethree component based library. Application software is able to be rapidly validated on a PC using the PC simulator.

*Ethernet can be supported via a USB to Ethernet adapter

Reliability

Our products continue to be successfully deployed in an enormously diverse range of applications where total reliability is vital.

All products, bespoke or standard range are backed up by a dedicated central team of specialist engineers able to rapidly adapt any product for a specific application and to provide an unrivalled level of customer support.

Displays are also supported with a return to base extended 24-month Manufacture warranty against mechanical failure or material defects.



Software

Our SDK is offered for a one-off licence fee from which customers can develop their own bespoke application solution. Available are optional plugins for J1939, NMEA 2000, and support hours are included should your engineers need any help along the way.

Alternatively, we can develop bespoke software to your specification using our experienced in house engineers.

Over the years our engineers have developed software for our displays to run rock crushers & mining machinery, measure performance of spraying equipment, acting as battery monitors, boat gyro stabilisers, plus many more including military and aerospace applications.

Also available is our Engine Monitor standard software for Industrial and Marine, which can be pre-loaded to our displays receiving and displaying J1939 engine and transmission data, including common Tier4 parameters, with active alarms (from DM1) & NMEA 2000 data, where supported.



Accessories

- > Cable Harnesses
- > Front Mounting Kits
- > Protective Sun Covers
- > Branding - Labels & Boxes
- > GPS Sensor
- > Development Harness

Specifications

Hardware	
CPU	Freescale iMX 286 (454 MHz ARM926EJ-S)
FLASH Memory	128 MB NAND
SDRAM	128 MB

Electrical	
Display	a-Si TFT LCD 3.5"
Resolution	320 (H) x 240 (V) QVGA
Active Area	70.08mm (H) x 52.56mm (V)
Viewing Angle	130/110 degrees from 6 O'clock
Number Of Colours	64K
Contrast Ratio	300:1
Brightness	750 NIT (cd/m2)
Power Requirements	10V to 32V DC
Sounder	Internal Buzzer
Connection	(1) 12 Pin Deutsch DT04-12PA Moulded in Receptacle Mates with Primary DT06-12SA (1) 12 Pin Deutsch DT04-12PB Moulded in Receptacle Mates with Secondary DT06-12SB

*Custom options available

Environmental	
Operating temperature	-40°C to +70°C
Storage Temperature	-40°C to +80°C
Degree of Protection	IP67 All Round, IP66 Front

Mechanical	
Case material	ABS
Case colour	Black
Dimensions	95mm (W) x 95mm (H) Front x 23mm rear (D) and 23mm forward.

Input/Output/Communications	
7 Analog Inputs	0-2.5 VDC, 0-10 VDC or 0-1000 OHMS
2 Switch Inputs	Switch Contact to ground or open collector type sensor - max. frequency = 50 Hz
RPM Input	Magnetic pick up or Hall effect & similar with push-pull output - max. frequency = 5 KHz
4 Relay/Solenoid Outputs	Open collector suitable 0.5A continuous load
Communications	1 X RS232, 2 X CAN Bus 2.0B (1 isolated), USB2.0

Part Number	
69227	C3 3.5" CAN Display
69228	C3 3.5" CAN Display with Engine Monitor Software Preloaded
69872	C3 3.5" CAN Display with Engine Gateway Monitor Software Preloaded
71094	C3 3.5" CAN Display - Low Voltage (meets SAE J1113/11 Pulse requirement)

Connectors

Primary

1	Ground
2	Power*
3	Relay/Solenoid Output 1
4	Relay/Solenoid Output 2
5	Isolated CAN Supply (-)
6	Isolated CAN Supply (+)
7	Isolated CAN Data H
8	Isolated CAN Data L
9	Relay/Solenoid Output 3
10	Relay/Solenoid Output 4
11	Primary CAN Data L
12	Primary CAN Data H

Mates with DT06-12SA

Secondary

1	Sensor 1 Analog Input
2	Sensor 2 Analog Input
3	Sensor 3 Analog Input
4	Sensor 4 Analog Input
5	Sensor 5 Analog Input
6	Sensor 6 Analog Input
7	Sensor 7 Analog Input
8	Digital Input/Flow Sensor 1
9	Digital Input/Flow Sensor 2
10	Tachometer Input
11	RS232 Receiver
12	RS232 Transmit

Mates with DT06-12SB

*Note 1. (10-32V DC) Supply should be protected by 500 mA – Rated circuit breaker/fuse.

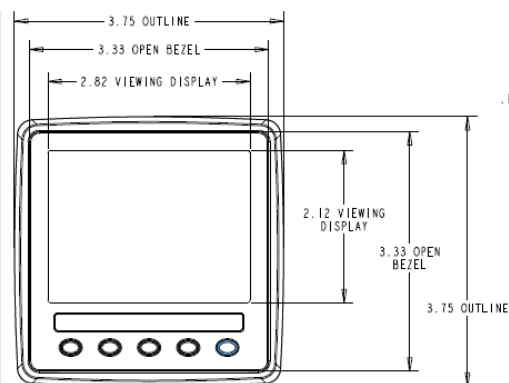
IMPORTANT NOTICE

Safety Warning: Please note analog input voltages should not exceed the supply voltage or damage may occur. No power should be present on the harness during connection. USB port should not be used for charging external equipment such as mobile phones.

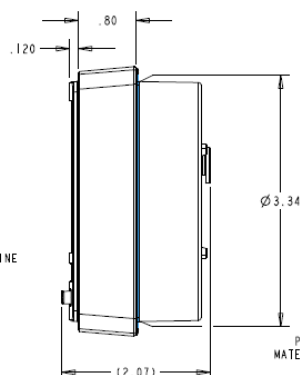
Connect Harness 1 (Primary) noting correct orientation of connector. Ensure it is fully mated so the connector latches into place. Then connect Harness 2 (Secondary) noting correct orientation of connector. Ensure it is fully mated to the connector latches into place.

Dimensions

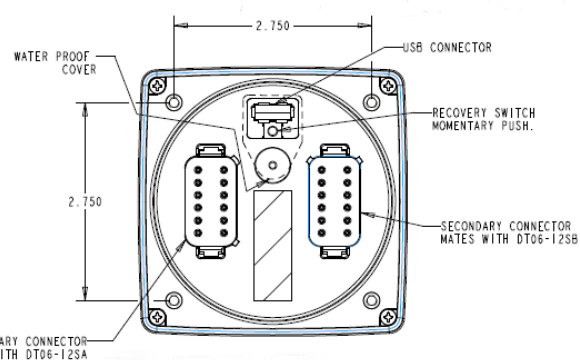
FRONT VIEW



SIDE VIEW



REAR VIEW



2021 v2