

**Technical data**


<b>3.5"</b> 3.5 INCH DISPLAY	<b>750 NIT</b> SUNLIGHT READABLE	<b>130° / 110°</b> VIEWING ANGLE	<b>320 x 240</b> RESOLUTION
<b>IP 67</b> INGRESS PROTECTION	<b>+ 70° - 40°</b> OPERATING TEMP	<b>7 X ANALOGUE</b> INPUTS	<b>2 X DIGITAL</b> INPUTS
<b>ETHERNET*</b>	<b>1 X USB PORT</b>	<b>4 X RELAY OUTPUTS</b>	<b>1 x RS232</b>  <b>1 X RS232</b>
<b>CAN<sup>2</sup></b> 2 X CAN BUS	<b>1 X TACHO INPUT</b>		

# C3I

## 3.5" COLOUR DISPLAY

FORMERLY THE CANVU™ 355 LP, IS THE LOW PROFILE MODEL IN THE RANGE OF 3.5" COMPACT COLOUR CAN BUS DISPLAYS.

The C3I is an addition to the rugged CAN bus display family from Veethree. It is a fully sunlight viewable 3.5inch colour display, which is compact and highly flexible with a low profile bezel. It has a larger more accessible and stylised keypad, which is backlit for ease of operation at night.

With 7 analogue inputs, 4 relay outputs combined with 2 digital inputs, 1 Tachometer input, 2 CAN input connections, plus a USB port the C3 offers maximum functionality. Ethernet can be supported via a USB to Ethernet adapter.

The high brightness QVGA (320 x 240 pixels) colour display is fully sunlight viewable and the unit is totally sealed.

Electrically and environmentally rugged, the C3I provides durable, flexible instrumentation for 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	128MB NAND
SDRAM	128MB

**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/m <sup>2</sup> )
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

**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	116mm (W) x 116mm (H) Front x 41mm rear (D) and 96mm rear (WxH)

**Input/Output / Communications**

7 Analogue 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, 1 X CAN Bus 2.0B (1 isolated), USB2.0

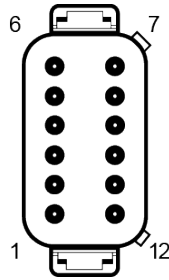
**Part Number**

3510	C3I 3.5" CAN Display
3513	C3I 3.5" CAN Display with Engine Monitor Software Preloaded
3514	C3I 3.5" CAN Display with Engine Gateway Monitor Software Preloaded

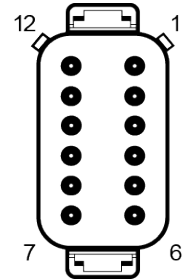


**Connectors (Version No. 06)**
**Primary**

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 3
11	Primary CAN Data L
12	Primary CAN Data H


**Secondary**

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



Mates with DT06-12SA

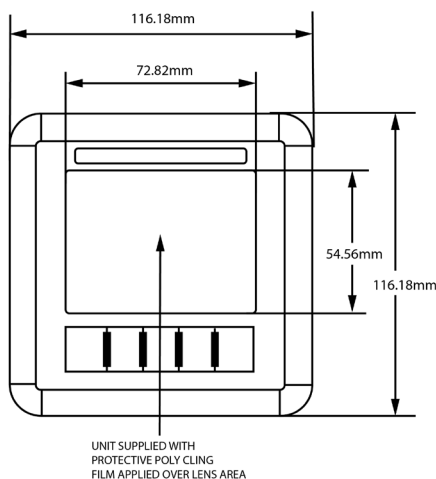
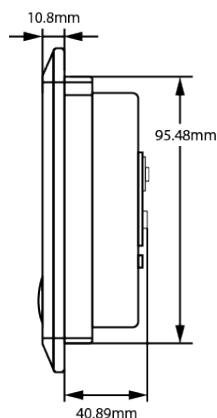
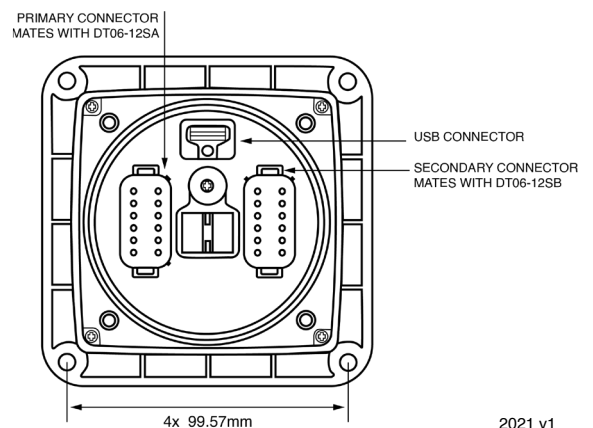
Mates with DT06-12SB

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

**IMPORTANT NOTICE**

Safety Warning: Please note analogue 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) note correct orientation of connector. Ensure it is fully mated so the connector latches into place.

**Dimensions**
**FRONT VIEW**

**SIDE VIEW**

**REAR VIEW**


2021 v1