

PRODUCT PREVIEW

D7

7" Dual touch/Tactile button display



Key Features:

- / Rugged 7" Dual Touch screen / Tactile Button Display
- / Onboard wireless connectivity with both WiFi and Bluetooth
- / iMX8 Processor from NXP
- / Fully Bonded 1000NIT TFT LCD
- / Qt – Cross-Platform Software Development
- / IP67 All round, IP66 front



D7 FEATURES TOUCH SCREEN, TACTILE BUTTON AND ROTARY ENCODER.

The D7 represents the first in a new line of rugged intelligent display solutions from Veethree. The D7 boasts superior CPU performance with an iMX8 processor from NXP. High resolution 7-inch projective capacitive touch screen delivers modern tablet-like aesthetics. Six large illuminated tactile buttons (with colour control) and rotary encoder to ease with screen navigation.

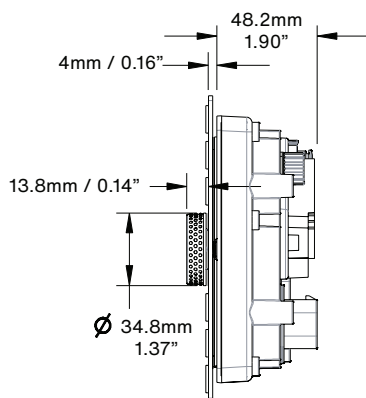
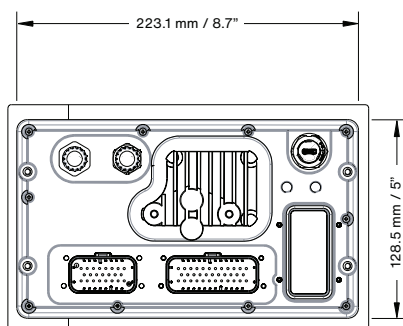
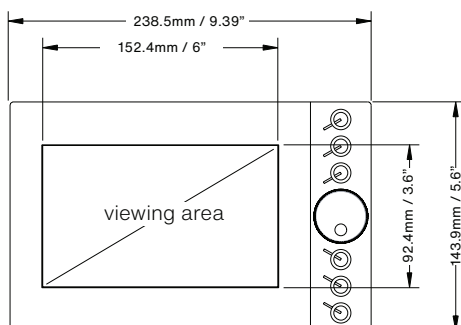
Full versatility with analogue inputs compatible with voltage, resistive and 4-20mA sender interface. Digital inputs allow for high-speed pulse counters. Multiple digital outputs capable of sourcing / sinking 500mA with allocation for PWM.

The iMX8 allows for high-speed CPU processing, screen transition and graphical movement will be swift and subtle. Front end graphical interfaces are developed using Qt, a Commercially Licenced cross-platform development environment and framework for creating applications with outstanding user experiences.

Communication includes 2 x CAN (1 x isolated), RS485/RS422/RS232 and Ethernet. Combined with on-board wireless connectivity via Bluetooth / WiFi - keep informed about your assets and see how your machine is performing at all times.

The WVGA (1280 x 768) PCAP fully bonded LCD provides outstanding viewability in all conditions including direct sunlight. The ruggedized unit is sealed to meet IP66/67 standards – suited to the harshest of environments and applications.

Specifications



Electrical

Display	Bonded 7" PCAP LCD
Resolution	1280 x 768 WVGA
Active Area	152.4mm x 92.4mm / 6" x 3.6"
Viewing Angle	85 degrees left/right/down/up
Contrast Ratio	800:1
Brightness	1000 NIT (cd/m ²) Full sunlight readable
Power Requirements	6V to 36V DC
Sound	Internal Buzzer Stereo / audio line out
Connection	x1 AMPSEAL23 pin x1 AMPSEAL35pin x1 M12 NMEA2k x1 USBC sealed, x1 Xcode M12 x1 SDmicro x1 SIM micro
Communications	x1 RS485/RS422/J1708 (selectable) x1 RS232 (always available) x2 CAN, (1 is NMEA, 1x non-isolated, always available) x1 1Gbps Ethernet Bluetooth 5.0 WiFi 2.4GHz and 5GHz 4G CAT1 - with 3G and 2G fallback

Memory

eMMC	8GB
RAM	1GB

Environmental

Operating Temperature	-30°C to +85°C
Storage Temperature	-40°C to +85°C
Degree of Protection	IP66 from the front and IP67 all round

Mechanical

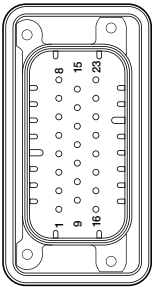
Case Material	PC/ABS
Case Colour	Black / Anthracite Grey
Dimensions	238.5mm x 152.4mm / 52.3mm (front to back) 9.39" x 6" / 2.06" (front to back)

Inputs / Outputs

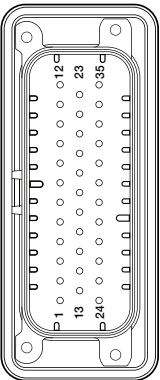
Analogue Input	x6 4-20mA x6 voltage or resistive (0-10V, 0-1Ω)
Switch Inputs	x5 Digital Inputs, x2 separate PWM inputs
Relay Output	x6 Relay outputs, x2 PWM outputs working as current source or sink
Video Inputs	x4 CVBS input channels (PAL and NTSC supported)

Please note: The product description and technical specifications are subject to change prior to the official D7 product launch.

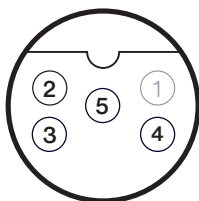
AMPSEAL 1 – Communications and Power

AMPSEAL 23 way connector	Pin functions (1-8)	Pin functions (9-15)	Pin functions (16-23)
	8. CVBS IN0+	15. CVBS IN0-	23. CVBS IN3+
	7. CVBS IN1+	14. CVBS IN1-	22. CVBS IN3-
	6. Line Out R	13. Line Out GND	21. CVBS IN2+
	5. Line Out L	12. RS422 TX-	20. CVBS IN2-
	4. No connection	11. RS422 TX+	19. RS422 RX-
	3. BATT-	10. RS232 TX	18. RS422 RX+
	2. No connection	9. RS232 RX	17. CAN1H (non-isolated)
	1. BATT+		16. CAN1L (non-isolated)

AMPSEAL 0 – Inputs and Outputs

AMPSEAL 35 way connector	Pin functions (1-12)	Pin functions (13-23)	Pin functions (24-35)
	12. 4-20mA 0+	23. 4-20mA 0-	35. Digital Input 0
	11. 4-20mA 1+	22. 4-20mA 1-	34. Digital Input 1
	10. 4-20mA 2+	21. 4-20mA 2-	33. Digital Input 2
	9. 4-20mA 3+	20. 4-20mA 3-	32. Digital Input 3
	8. 4-20mA 4+	19. 4-20mA 4-	31. Digital Input 4
	7. 4-20mA 5+	18. 4-20mA 5-	30. BATT-
	6. Analogue Input 0	17. Analogue Input 1	29. PWM Input 0
	5. Analogue Input 2	16. Analogue Input 3	28. PWM Input 1
	4. Analogue Input 4	15. Analogue Input 5	27. PWM Output 0
	3. Relay Output 5	14. Reference Resistor	26. PWM Output 1
	2. Relay Output 4	13. Relay Output 2	25. Relay Output 0
	1. Relay Output 3		24. Relay Output 1

CAN (NMEA2000™)

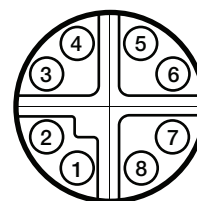


M12-A code (Male)

Pin Number / Function:

- 1: No connection
- 2: Isolated power +
- 3: Isolated power -
- 4: Isolated CAN High
- 5: Isolated CAN Low

1Gbps Ethernet



M12-X code (Female)

Pin Number / Function:

- 1: Data A+
- 2: Data A-
- 3: Data B+
- 4: Data B-
- 5: Data D+
- 6: Data D-
- 7: Data C+
- 8: Data C-

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