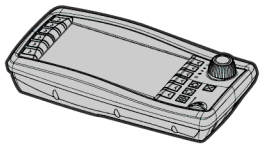




Overview



Description

The Opus A6F and A6S displays are cost-efficient, rugged operator control panels for use on heavy-duty vehicles and work machines that must operate outdoor in harsh conditions. They are fully equipped with an encoder, four hard and twelve soft function keys, integrated buzzer, RS232 and USB ports and two CAN ports. The A6F (full-featured) unit has more memory, four inputs, three digital outputs, Ethernet, and 3 video inputs for use with a camera to monitor process operations.

Features

Feature	A6S	A6F
Keypad		
Soft keys:	12	12
Hard keys:	4	4
Encoder knob w/detents and pushbutton:	1	1
Touchscreen (PCT):	N	Y
Light sensor:	Y	Y
Memory		
RAM:	256 MB	512 MB
Mass storage:	2 GB	4 GB
Communications Interface		
CAN bus 2.0 B ports per ISO 11898:	2	2
RS232 serial ports:	1	1
USB 2.0 (main connector):	1	1
USB 2.0 (front panel):	N	Y
Ethernet 10/100 Mb:	Y	Y
I/O		
Analog/digital inputs:	0	4
Digital outputs:	0	3
Video Interface		
Composite CCITT input with 12 V camera supply:	1	3

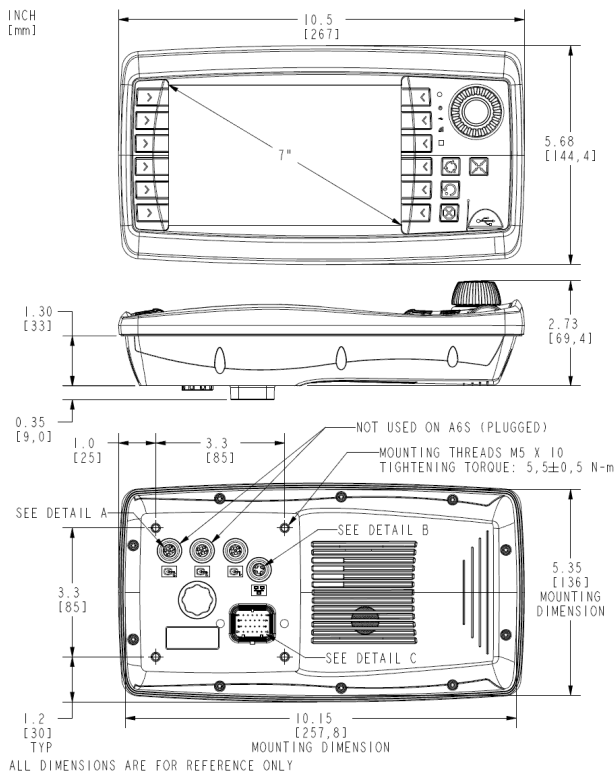


General Specifications

Display

Size	7" diagonal TFT color graphic LCD
Dimensions	67 X 144 X 70 mm (2.64 X 5.67 X 2.76 in)
Pixels	800 X 480
Viewing angle	50°
Mounting	Sandalone, dashboard, or pedestal
Power supply	8 Vdc minimum to 36 Vdc maximum
Main connector	AMP super seal 26 pin (TYCO-AMP 1437288-6)
Video connector	M12, female B-code
Ethernet connector	M12, female D-code
Processor	I.MX6 SOLO, 32 BIT, 800MHz
Programming	TOPCON Projector- Tool for Windows NT/2000/XP supporting CANopen, Generic driver, CANfreestyle, J1939.
Internal clock	RTC buffered for 2 weeks by gold cap, ± 4s/day
Ingress protection	IP66
Operating temp	-30 to 65 °C (-22 to 149 °F)
Storage temp	-40 to 85 °C (-40 to 185 °F)
Vibration	5 G at 57 to 2000 Hz - Note: 150 hours per axis
Shock	30 G - Note: 11 ms, 10x per axis

Dimensions and Installation

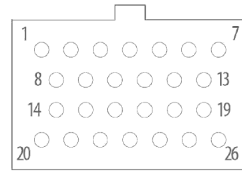




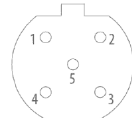
Pinout

MAIN CONNECTOR PINOUT		
PIN NO.	A6F	A6S
1	STEADY PLUS	STEADY PLUS
2	IGNITION PLUS	IGNITION PLUS
3	BATTERY GRND	BATTERY GRND
4	CAR GROUND	CAR GROUND
5	N.C.	--
6	N.C.	--
7	N.C.	--
8	CAN1 HIGH	CAN1 HIGH
9	CAN1 LOW	CAN1 LOW
10	CAN2 HIGH	CAN2 HIGH
11	CAN2 LOW	CAN2 LOW
12	USB VCC, +5VDC	USB VCC, +5VDC
13	USB GROUND	USB GROUND
14	USB DATA -	USB DATA -
15	USB DATA +	USB DATA +
16	RS232: RXD	RS232: RXD
17	RS232: TXD	RS232: TXD
18	RS232: GND	RS232: GND
19	ANALOG/DIGITAL INPUT 3	--
20	ANALOG/DIGITAL INPUT 1	--
21	ANALOG/DIGITAL INPUT 2	--
22	ANALOG/DIGITAL INPUT 4	--
23	SERVICE ENABLE	SERVICE ENABLE
24	DIGITAL OUTPUT 3	--
25	DIGITAL OUTPUT 1	--
26	DIGITAL OUTPUT 2	--
SEE DETAIL A	VIDEO CONNECTOR (3)	VIDEO CONNECTOR (1) ²
1	VIDSIG+	VIDSIG+
2	MIRROR	MIRROR
3	CAMERA+	CAMERA+
4	CAMERA-	CAMERA-
5	VIDSIG GND	VIDSIG GND
SEE DETAIL B	ETHERNET CONNECTOR	ETHERNET CONNECTOR
1	TD +	
2	BD +	
3	TD -	NOT PRESENT
4	RD -	

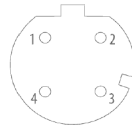
NOTES: 1 - CAR GROUND (PIN #4) MUST BE CONNECTED TO THE CHASSIS
 OR A CONDUCTOR AS SHORT AS POSSIBLE. EVEN IF THERE IS NO
 CONDUCTIVE CHASSIS AVAILABLE (E.G. IN E-VEHICLES) THE PIN
 HAS TO BE CONNECTED TO THE NEGATIVE POLE OF THE BATTERY.
 OTHERWISE, THERE WILL BE NO PROTECTION AGAINST OVER-VOLTAGE,
 SHORTCUT OR ELECTRICAL SHOCK/DISCHARGE (ESD).
 2 - UNUSED VIDEO PORTS ARE CAPPED



DETAIL C



DETAIL A



DETAIL B

To Order

Model A6S (Standard Model): Part No. 4002748

Model A6F (Full-Featured Model): Part No. 4002749

Model A6F (Full-Featured w/CoDeSys): Part No. 4002861

Power Cable: Part No. 4000403

Video Cable: Part No. 4000411

Mounting Kit: Part No. 4000412

Dashboard Mounting Kit: Part No. 4000413

Connector Plug: Part No. 4000415

Socket Contacts: Part No. 4002658 (50 pc)

Cavity Plugs: Part No. 4002659 (50 pc)

Software License Key: Part No. 4100098

Note: Topcon displays can be programmed without a software license in demo mode only. The software (Topcon Toolchain) can be downloaded free from the [HydraForce Electronics Portal](https://www.hydraforce.com/portal) but the software license key must be purchased.