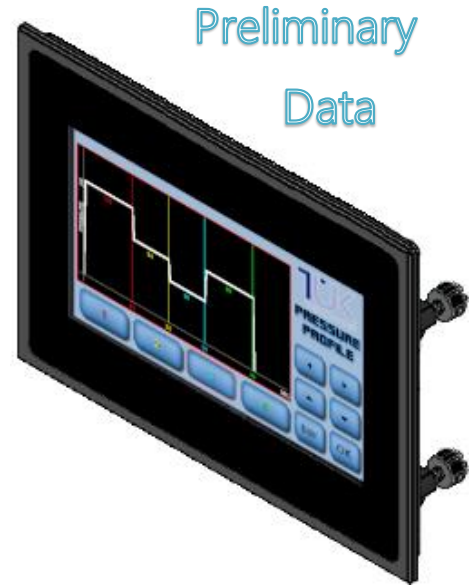


Product Features

- 4.3inch 24 Bit Colour TFT with Resistive Touch and Front Mounting Bezel
- Supply Input Voltage 9V-36VDC
- Outputs 5.0V / 3.3V for peripheral supply
- 1x 4G-32G SDHC slot for application program and data logging memory
- 1x USB Host / Device Interface 2.0 for PC or Memory Stick
- 2x RS232 with RXD/TXD or single with CTS/RTS
- 1x RS485 with Independent Transmit / Receive for Full Duplex / Daisy Chain
- 1x SPI 3.3/5V Isolated Interface or Isolated 1x Digital In / 3x Digital Out
- 1x TTL Async Serial 3.3/5V Isolated Interface or 1x Digital In / 1x Digital Out
- 1x I2C 3.3/5V Isolated Interface
- Battery-backup Real Time Clock (RTC)
- Supports 3.5mm / 5.0mm Screw Terminal Adaptors via 14-way IDC link
- Supports D-Type back panel connectors for serial interfacing via 10way IDC link
- Expansion via I2C to Thermocouple / PT100 / Analogue Inputs and Digital I/O



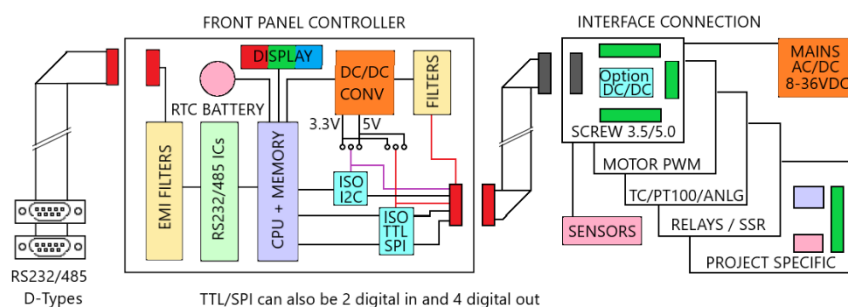
The resistive touch panel provides a cost effective one touch solution capable of accepting stylus, bare or gloved finger. The firmware can adjust sample rate, de-bounce, auto-repeat and acceptance area depending on required action. The bezel frame is symmetrical allowing 90 and 180 degree rotation with control by single software orientation command.

Product Parameters	Unit	Min	Max	Notes
Supply Voltage V_a	VDC	9	30	Power consumption ~2.5W with LED backlight 100%
Output Voltage 3V3	VDC	3.2	3.4	Maximum current 50mA
Output Voltage 5V0	VDC	4.75	5.25	Maximum current 100mA
Real Time Clock Battery	VDC	3	3	CR1216 / CR1225 battery holder
Operating Temperature	°C	-20	70	
Storage Temperature	°C	-30	70	
Relative Humidity	%	20	85	25°C operation, non-condensing
Display Brightness	cd/m2	280	350	

Interface Parameters	Unit	Input		Output		Notes
		Min	Max	Min	Max	
USB Host / Device Supply	VDC	4.75	5.25	4.75	5.25	Maximum current 150mA source
Isolated Digital Interfaces Low Level	VDC		0.3xVDD		0.3xVDD	3.3/5V jumper selectable. Max 10mA sink
Isolated Digital Interfaces High Level	VDC	0.6xVDD		0.6xVDD		3.3/5V jumper selectable. Max 10mA source
Isolation Voltage	VDC	300V				With external isolated supplies
RS232 Interface	VDC	-15	+15	-3	+7	Internal Isolated / External Supply

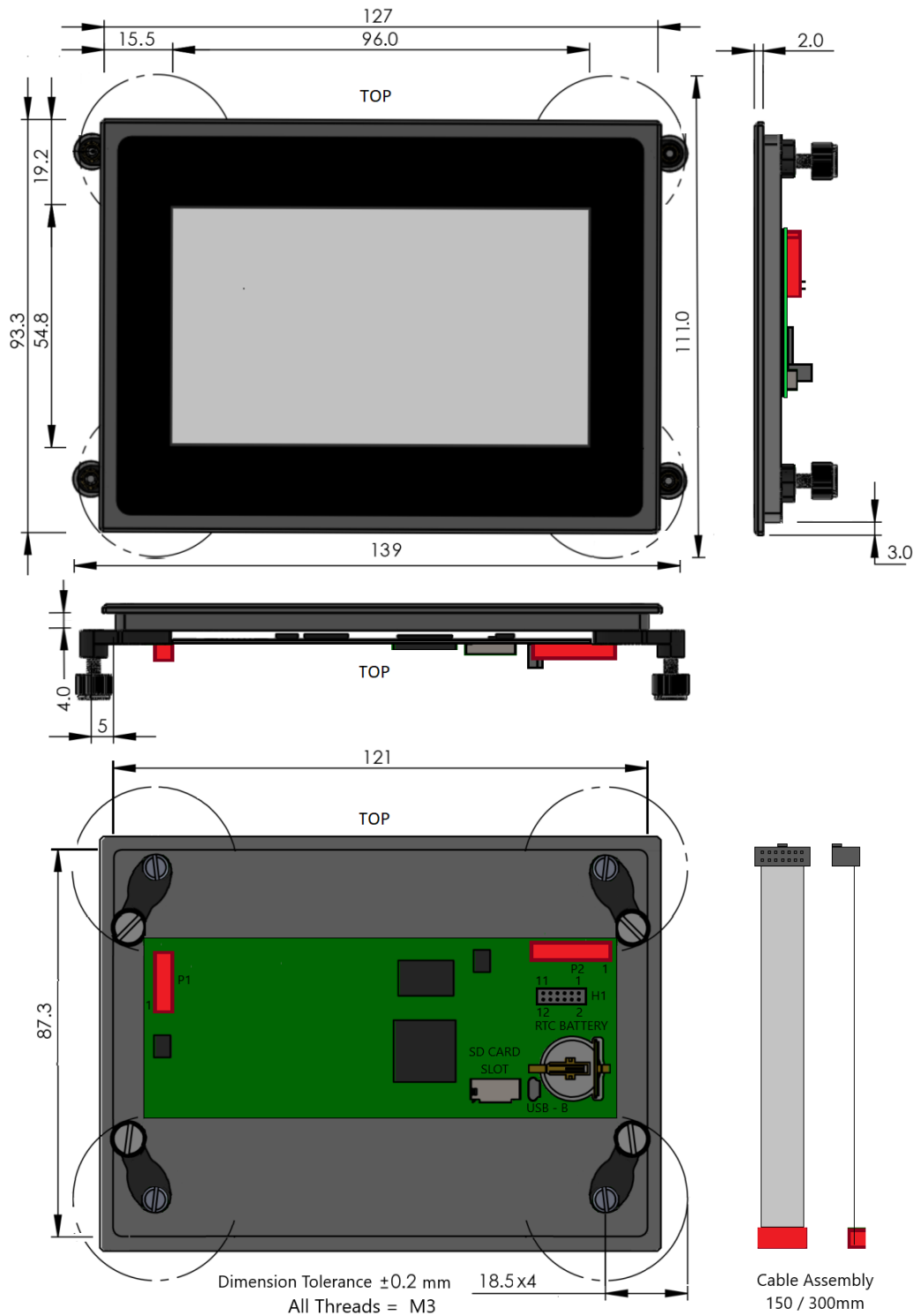
Since all outputs can sink and source, do not parallel connect.

Interface Block Diagram



XTD Standard Front Panel Controller
Customer Oriented I/O Expansion Modules
Onboard Port Isolation / Voltage Selection

The interface connection module can be wired into the heart of your machine then the XTD controller added once the front panel is fitted with minimal stress to wiring.



P1 RS232/RS485	
Pin	Signal
1	RS485 TX+(A)
2	RS485 RX-(B)
3	RS232 TXD1
4	RS232 CTS1 / RXD2
5	RS232 RXD1
6	RS232 RTS1 / TXD2
7	RS485 RX+(A)
8	RS485 TX-(B)
9	PSU 0V
10	PSU +5V OUT

P2 PSU/I2C/TTL/SPI	
Pin	Signal
1	PSU +8 to 36V
2	PSU 0V
3	I2C +3.3/5V
4	I2C 0V
5	I2C SCL
6	I2C SDA
7	TTL-TX or OUT1
8	TTL-RX or IN1
9	TTL/SPI +3.3/5V
10	TTL/SPI 0V
11	SPI-DIN or IN2
12	SPI-SLCT or OUT2
13	SPI-DOUT or OUT3
14	SPI-CLK or OUT4

I2C/TTL/SPI PSU SELECT			
I/O	V	Pin	Pin
I2C	3.3	11	9
I2C	5.0	7	9
I2C	0V	1	3
T/S	3.3	8	10
T/S	5.0	12	10
T/S	0V	2	4

T/S = TTL / SPI
Remove the associated jumpers when using an external supply.

Preliminary
Data

The I2C and TTL/SPI power connections can be connected to external isolated supplies to achieve isolated data input/output or connected via the links to the internal 3.3/5V supplies derived from the 8-36V supply, where data input/output is not isolated. The connectors used are TE low profile MicroMatch® 8-338069-0 for P1 (10 way) and 8-338069-4 for P2 (14 way). The PSU selection header is supplied with 4 off plugin 2mm jumper links defaulting to 3.3 VDC internal supply. The swing out lugs can be removed and alternative fixing method used to retain the assembly using the M3 screw threads. The thumbscrew lugs swing out once inserted for securing into a 1mm to 4mm thick front panel.

E&OE.