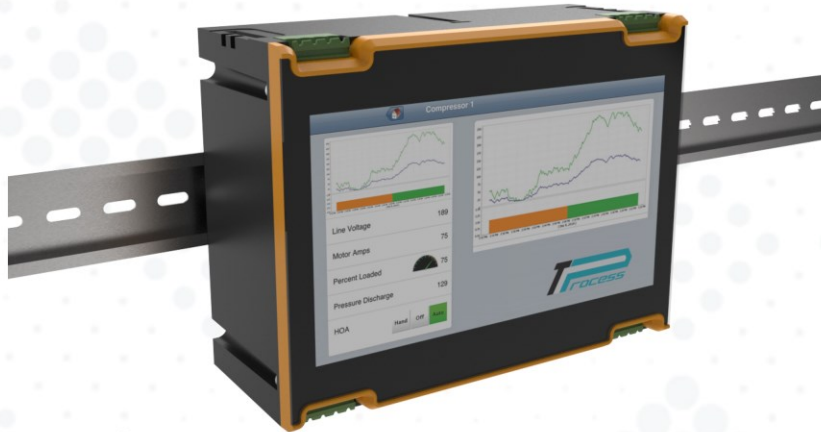


Smart controller is a modular industrial controller device. There is one main module in each device which contains main CPU and memories and also have some basic interfaces. However for more features and interfaces there are some peripheral modules which extend the system functions.



## Main Module Specifications

<b>CPU</b>	Quad Core Cortex-A9 @ 1.4GHz
<b>RAM</b>	1GB 32bit DDR3 RAM expandable to 2GB
<b>Flash Memory</b>	8GB onboard eMMC memory expandable to 16GB
<b>Operating System</b>	Linux Ubuntu-core, Android
<b>External Memory</b>	MicroSD Card up to 32GB
<b>Display</b>	5.0-inch TFT LCD with capacitive touch screen
<b>Audio/Buzzer</b>	Digital high-quality audio with internal 2W amplifier
<b>Ethernet</b>	2 × RJ45 connector for Ethernet
<b>Wi-Fi</b>	802.11 b/g/n, 2.4GHz
<b>Bluetooth</b>	Bluetooth V4.2, BLE
<b>GNSS</b>	Multi-GNSS engine for GPS, GLONASS, Galileo and QZSS
<b>Network Technologies</b>	4G Dual-Band UMTS/HSPA+, Quad-band GSM/GPRS/EDGE LTE
<b>USB</b>	2 × USB Host 1 × USB Device
<b>HDMI</b>	Micro-HDMI port for second LCD
<b>LED indicator</b>	LED indicator for power – status and each GPIO
<b>Serial Ports</b>	2 × RS232 1 × RS485 1 × CAN
<b>DIO</b>	4 × input 4 × output
<b>External antenna port</b>	1 × GPS 1 × WiFi/Bluetooth 1 × 4G
<b>Power supply</b>	9-36 VDC
<b>Protection of power supply</b>	Reverse polarity protected, overvoltage protection

## Digital I/O Module Specifications

Number of DIO channels	32 configurable Input/Output
Power supply	9-36 VDC
Max Power consumption	2.0 Watt
Input current limitation	1.0 mA (at 24 V power supply)
Input thresholds	EN61131-2 to Type I and III sensors
Input protection	Against overvoltage, negative voltages, burst, surge, ESD
Output type	Isolated digital output with high-side or push-pull drivers
Maximum current per output	100 mA (push-pull mode), 500 mA (high-side mode)
Output protection	Against short circuit, overload, negative voltages, burst,surge, ESD
Protection of power supply	Reverse polarity protected, overvoltage protection

