

## PAC Touch e-motion technology

Features	TS804 Visual PLC + CNC
Touch Screen Display	4,3" color, resolution 480x272
Main CPU	CPU Arm 7
Digital Inputs	16 x 24Vdc, PNP with led
Digital Outputs	16 x solid state, 24 Vdc, PNP, 1,2Amp each with led
Configurable I/O	2 x configurable by external jumpers as: 2 x analog output $\pm 10V$ - resolution 14 bit or: 2 x STEPPER+DIR (12V push pull - max 1 Mhz) or: 2 x analog Inputs 14 bit - 0-3,3V
Encoder inputs	2 x encoder inputs settable as Line driver or open collector, 12 or 5V encoder supply (settable by ext. jumpers), 1,5 mhz bandwidth
Analog outputs	2 x $\pm 10V$
Analog inputs	2 x 0-3,3V (0-10V or 0-20 mA can be obtained with external resistors)
Main Flash storage memory	1 x removable SD Flash min 1 GB
Serial ports	2 x RS232
Lan Ethernet - Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Bus - USB	1 x USB 2.0 for pen drive
Field Bus	1 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)

Features	TS804L Visual PLC + CNC	TS804LX Visual PLC + CNC
Touch Screen Display	4,3" color, resolution 480x272	
Main CPU	CPU Arm 7	
Digital Inputs	4 x 24Vdc, PNP	8 x 24Vdc, PNP*
Digital Outputs	4 x solid state, 24Vdc, PNP, 1,2 A each	8 x solid state, 24Vdc, PNP, 1,2 A each
Configurable I/O	-	4 x configurable as digital inputs 24Vdc or outputs
Analog inputs	4 x configurable by jumper as 0-20 mA, 0-10V - 0-3,3 V	4 x configurable by jumper as 0-20 mA, 4-20 mA, 0-10 V: 2 are configurable for direct input thermoresistance Pt 100

Analog outputs	2 x configurable as 0-20 mA / 0- 10 V / PWM Stepper (to be specified before purchasing)	2 x configurable as 0-20 mA / ± 10 V / PWM
Main Flash storage memory	1 x removable SD Flash 1 GB	
Encoder inputs	1 x Input Line driver, Push Pull or Open Collector - 150 Khz bandwidth	2 x inputs PNP Open Collector (on inputs 5-8 digital) - bandwidth 200 Khz
Serial ports	2 x RS 232 + 1 x RS 485	1 x RS 232 + 1 x RS 485
Lan Ethernet - Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function	
Universal Serial Bus - USB	1 x USB 2.0 for pen drive	
Field Bus	1 x CAN BUS MASTER, Can Open protocol	
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)	

**Features**

**TS680 ARM Visual Plc + CNC**

CPU	Cortex M3 - Arm 7
Touch Screen Display	5,7" LED color, resolution 320x240
Digital Inputs	20 x PNP, with LED status indicator
Digital Outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog Inputs	6 x resolution 12 bit, configurable by jumpers as 0-10V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit - 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet - Teleservice	1 x Ethernet TCP /IP - FTP compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)

**Features**

**TS970 ARM Visual Plc + CNC**

CPU	Cortex M3 / Arm 7
Touch Screen Display	7" LED color, 800x480 resolution
Digital Inputs	20 x PNP, with LED status indicator
Digital Outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog Inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet - Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)

**Features**

**TS690 ARM Visual Plc + CNC**

CPU	Cortex M3 - Arm 7
Touch Screen Display	10,4" color, 800x600 resolution
Digital Inputs	20 x PNP, with LED status indicator
Digital Outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog Inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet - Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)

**Features**

**TS7002 ARM Visual Plc + CNC**

CPU	Cortex M3 / Arm 7
Touch Screen Display	12" LED color, resolution 800x600
Digital Inputs	20 x PNP, with LED status indicator
Digital Outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog Inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) 4 analog output +-10V 12 bit 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet - Teleservice	1 x Ethernet TCP/IP - FTP compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock: 24 hours with SCHEDULER (real calendar)

**Features**

**TS7002RT Windows Real Time Based CNC System**

CPU	Intel Atom D525 Dual Core 1,86 GHz
Touch Screen Display	12" 4:3 color, resolution 800x480 (Optional: 1024x768)
Main Storage memory	1 x flash disks (different sizes available)
Serial Ports	1 x RS 232
Universal Serial Port Bus - USB	4 x USB 2.0
Mouse and Keyboard	1 x PS/2 port
Integrated sound card	1 x Audio port set (jack 3,5 mm for audio line output, mic input)
Field Bus	3 x CAN BUS, Can Open protocol (+3 optional)
Lan Ethernet	1 x Ethernet 10/100/1000

**Features**

**TS7005RT Windows Real Time Based CNC System**

CPU	Intel Atom D525 Dual Core 1,86 GHz
Touch Screen Display	12"4:3 color, resolution 1024x768
Main Storage memory	1 x flash disks (different sizes available)
Serial Ports	1 x RS 232
Universal Serial Port Bus - USB	4 x USB 2.0
Mouse and Keyboard	1 x PS/2 port
Integrated sound card	1 x Audio port set (jack 3,5 mm for audio line output, mic input)
Field Bus	3 x CAN BUS, Can Open protocol (+3 optional)
Lan Ethernet	1 x Ethernet 10/100/1000