

TOUCH-240

Touchpanel Multitasking Computer

Description

The new **TOUCH 240** touchpanel computer is designed for mobile and stationary control and communication applications. The unit offers an illuminated graphical LCD as well as input capabilities through an active touch area and 5 function keys. The core of the unit is a fast executing multitasking computer programmable in an intuitively understandable process BASIC dialect. The integrated development environment offers quick cycles for editing, compiling and debugging at source code level, as well as a set of tools and example applications for fastest development times.

For visualisation of complex issues, presentation of pictures and drawings, the display of virtual instruments and animated sequences, high speed high resolution vector and pixel graphic is available. Text messages can be displayed in scalable sizes to meet best readability from various distances and under working conditions as machine operating, car or truck driving etc. The active touch area is been used for all kinds of human inputting as alphanumeric inputs, numbers, menu operation, signatures and manual drawings as well as settings for the unit itself.

The use of FLASH technology allows easy programming and fast software updates, data recordings, import of data files, the use of one-time transaction code lists and access control codes, counters of operating hours ... etc. The 128 kbyte or 512 kbyte SRAM space is double buffered, saving RAM data in power down mode and even when battery is removed.



Typical fields of application for the **TOUCH 240** in mobile and stationary areas are e.g.:

- Navigation, GPS Tracking
- Fleet management
- Communication, as:
GSM, Inmarsat D+, Packet Radio
- Laboratory instruments
- Airconditioning
- Light- and power management
- Testing systems
- Security / Alarm systems ... etc.

The rugged plastic / meta construction fits well for frontpanel applications or can be fixed through hinge foot, swan-neck or other carrier systems, which are available as accessory parts.

Features

- 512 KB / 2 MB FLASH (Program and data)
 - 512 KB SRAM (buffered)
 - Realtime Clock
 - Double buffered by external battery (e.g. vehicle battery) and internal (ca. 3h)
 - High speed multitasking:
32 BASIC- / 64 system tasks simultaneous
 - High speed vector- and pixel graphics
 - 2 x RS-232 resp. optional 1 x RS-232, 1 x RS-485
 - 8 x open collector outputs 40V / 50 mA* max.
 - 4 x digital inputs 9 - 36 V / 4 ... 15 mA
 - 3 x analog inputs 0 - 5 V, 0 - 10 V or 20 mA
 - Signal transmitter
 - Software controlled LCD backlight and contrast
 - Power supply: 9 - 16V_{DC} / 24V_{DC}
- Device has to be secured semi-time lag with 1A.
- Dimensions: ca. 175 x 135 x 30 mm (6.9" x 5.3" x 1.2")
 - Weight: ca. 0.7 kg (25 ounces)
 - Male DB-37 connector on backside
 - Temperature ranges:
Operation: -20°C ... 70°C
Storage: -30°C ... 80°C
Not condensing.

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Pinout:		DB-37m		
reserved	- 19	●	37 Alarm Out	Alarm output
PC-Mode=0, RUN=1	PC-Pin 18	●	36 Xan1	Analog-Input-1
Analog-Input-2	Xan2 17	●	35 XAn3	Analog-Input-3
Analog-Input Ground	AGND 16	●	34 Out10	OC-Out, 40V / 50mA* max
OC-Out, 40V/50mA* max	Out11 15	●	33 Out12	OC-Out, 40V / 50mA* max
OC-Out, 40V/50mA* max	Out13 14	●	32 Out14	OC-Out, 40V / 50mA* max
OC-Out, 40V/50mA* max	Out15 13	●	31 Out16	OC-Out, 40V / 50mA* max
OC-Out, 40V/50mA* max	Out17 12	●	30 V+ Standby Input	SRAM Supply +9...24V
reserved	- 11	●	29 Vcc intern	+5V _{DC}
Ground for Opto-In	Opto-GND 10	●	28 RS-485 A*	Channel-0 (Option)
Digital Input 9...24V	Opto-In10 9	●	27 RS-485 B*	Channel-0 (Option)
Digital Input 9...24V	Opto-In11 8	●	26 GND intern	Digital Ground internal
Digital Input 9...24V	Opto-In12 7	●	25 RxD-1	RS-232, Ch-1 (Standard)
Digital Input 9...24V	Opto-In13 6	●	24 TxD-1	RS-232, Ch-1 (Standard)
RS-232, Ch-0	CTS-0 5	●	23 RxD-0	RS-232, Ch-0
RS-232, Ch-0	RTS-0 4	●	22 TxD-0	RS-232, Ch-0
Reset-Input, Low-active	Reset-In1 3	●	21 GND ext	0V Powersupply
Powersupply 0V	GND ext 2	●	20 V+ ext	9...16V _{DC} / 24V _{DC} Powersupp.
Powersupp. 9...16V _{DC} / 24V _{DC}	V+ ext 1	●		

Power supply: 9 ... 16V_{DC} / 600 mA_{typ} to be externally secured semi-time lag with 1 A. Optional: 24V_{DC} / 300 mA_{typ}
 Connection: „V+ ext“ and „GND ext“ (2 connector pins each)

V+ ext: Main power supply. In vehicles 12V o. 24V supply system, normally wired through ignition lock.

GND ext: Imparted ground connection 0V

V+ Standby Input: Backup input for data securing of SRAM data and clock, power consumption ca. 1...10 mA. If the backup function is needed, the backup input usually isn't switched, thus directly connected to the supply system.

Opto-GND: Optical isolated GND connector for opto inputs, to be connected to GND_{ext} if no optical isolation is wanted.

Vcc internal: +5V from system internal, for PC mode / RUN mode switching

GND internal: 0V from system internal

AGND: Analog ground, put static on common system GND

Mode selection: Pin-18: „0“ level = „GND internal“ (from pin 26 -> PC mode)
 „1“ level = „Vcc internal“ = 5V (from pin 29 -> RUN mode)

RS-485: Optional instead of RS-232 channel-0.

Analog inputs: 0...10V standard, optional: 0...5V or 20 mA.

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Products

Starter Kit Touch-240

Complete kit with all soft- and hardware for quick developments:

- 1 x TP240-4/4A Touchpanel computer
- Testing panel
- IDE with printed manual set (en.)
- 110...240V power supply, accessories

TP240-Starter-int _____ \$ 980,-

Touch-240 Touchpanel computer, 1 MByte

512 KB SRAM + 512 KB FLASH, 9...16V_{DC}
(purchase of complete lots):

TP240-4/4A	_____	1+	\$ 588,-
TP240-4/4A	_____	10+	\$ 548,-
TP240-4/4A	_____	25+	\$ 511,-
TP240-4/4A	_____	100+	\$ 473,-
TP240-4/4A	_____	250+	\$ 433,-
TP240-4/4A	_____	1000+	\$ 379,-



Touch-240 Touchpanel computer, 2,5 MB:

512 KByte SRAM + 2 MByte FLASH, 9...16V_{DC}
(purchase of complete lots):

TP240-4/16A	_____	1+	\$ 619,-
TP240-4/16A	_____	10+	\$ 577,-
TP240-4/16A	_____	25+	\$ 538,-
TP240-4/16A	_____	100+	\$ 499,-
TP240-4/16A	_____	250+	\$ 455,-
TP240-4/16A	_____	1000+	\$ 399,-

Option: Power supply 24V_{DC}:

TP240-24V	_____	100+	\$ 20,30
TP240-24V	_____	250+	\$ 18,10
TP240-24V	_____	1000+	\$ 15,80

Accessories: Mounting basis

TP240-KIBASE: Tilting hinge foot
 TP240-KUBASE: Ball jointed foot
 TP240-SCBASE: Swan-neck, ca. 20 cm

TP240-.....	_____	1+	\$ 52,-
TP240-.....	_____	10+	\$ 50,-
TP240-.....	_____	25+	\$ 48,-
TP240-.....	_____	100+	\$ 46,-
TP240-.....	_____	250+	\$ 44,-
TP240-.....	_____	1000+	\$ 42,-

