



APPLICATIONS

The new EM ToughBox is the perfect Plug&Play system solution, specially designed for FANLESS applications.

- ▶ Industrial Control and Automation
- ▶ Measurement and Control
- ▶ Medical
- ▶ Infotainment
- ▶ Mobile Applications

ICP-TB-14



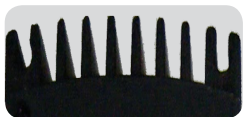
ICP-TB-14

FEATURES

- ▶ Powered by proven Intel® technology
- ▶ Supporting Intel® Atom™ processors and chipsets for commercial or industrial temperature grade
- ▶ Allows simultaneous use of UMTS and WLAN for extended router applications
- ▶ Supports up to 2GB DDR2 Memory
- ▶ Control function IEC61131-3 CoDeSys V3.xx
- ▶ Design, Production and Support "Made in Germany"

BENEFITS

- ▶ Low emission, high immunity
- ▶ Long term availability
- ▶ Free of rotating parts
- ▶ Full software compatibility
- ▶ Rugged & reliable choice for demanding embedded applications
- ▶ Small installation depth
- ▶ Integration- and application-services, trainings



OVERVIEW

The EM ToughBox is powered by proven technology, including Intel® Atom™ Processors up to 1,6 GHz. An optional wireless module supporting GPRS, EDGE, UMTS and HSDPA is available and at the same time a optional Wireless LAN module can be used.

SPECIFICATION SUMMARY

- ▶ Fanless operation
- ▶ Five Gigabit Ethernet Port
- ▶ WLAN Option
- ▶ UMTS Modem Option with SIM card reader
- ▶ Extended Temperature Option

SPECIFICATIONS

CPU

Commercial temperature version:

Intel® Atom™ processor Z510P
1.1 GHz - 512 KB cache

Intel® Atom™ processor Z530P
1.6 GHz - 512 KB cache

Industrial temperature version:

Intel® Atom™ processor Z510PT
1.1 GHz - 512 KB cache

CHIPSET

Commercial temperature version:

Intel® System Controller Hub
US15WP

Industrial temperature version:

Intel® System Controller Hub
US15WPT

MAX. MEMORY

1GB DDR2 RAM (Default)
2GB DDR2 RAM (Option)

BIOS

UEFI-BIOS

1 GBIT ETHERNET

Five Gigabit Ethernet ports

WLAN

Yes, 802.11 b/g (Option)

WIRELESS

Yes, GPRS/EDGE/UMTS/HSDPA module (Option)

USB CLIENT PORT

Yes, miniUSB Type B (4-pin) Connector

USB HOST PORTS

2x USB 2.0 Host Ports Type A

CAN BUS

Yes, 9-pin female D-SUB Connector

SERIAL PORT

Yes, 9-pin male D-SUB Connector

DVI-D PORT

Yes

INDUSTRIAL FLASH DISK

2GB industrial flash disk (Default)
4GB industrial flash disk (Option)

FANLESS

Designed for fanless operation

CONTROL FUNCTION

IEC61131-3
CoDeSys V3.xx

OS SUPPORT

Microsoft Windows® XP Embedded

MONITORING AND MANAGEMENT

Hardware Monitoring and Watchdog

POWER INPUT

8V-32V DC

EMI SHIELDING

Yes CE, other upon request

SIZE

185 mm × 135 mm × 30 mm
(L × W × H)

WEIGHT

Approx 500 grams

CASE

Aluminium diecast

MOUNTING

DIN Rail Mounting, others on request

TEMPERATURE RANGE

Commercial temperature version:

FANLESS Operation:
0°C to +60°C ambient

Storage:

-40°C to +85°C ambient

Industrial temperature version:

FANLESS Operation:
-40°C to +85°C ambient

Storage:

-40°C to +100°C ambient

HUMIDITY

Max. rel. humidity of atmosphere non condensing
Working up to 75%
Storage up to 95%