



SUNIT e8

The Sunit e8 On-board computer is specially designed and manufactured for utility and commercial vehicle use fulfilling vehicle industry requirements and being verified in accordance with vehicle industrial ISO, IEC and EMC standards.

Users and operating environment required demands are taken into account through the development of Sunit e8 computer.

This has resulted into unique features like integrated circuits of GPS navigation and GSM/GPRS communication, standard CAN-bus interface to vehicle's own control network, intelligent guidance of computer start & stop according to vehicle utilization mode, integrated TV and Radio receivers, 2x30 amplifier, automatic display light adjustment according to environmental light, controlled power management, smart battery backup system, withstanding shocks and vibration, sustaining widely varying temperature and humidity, embedded technology in compact, light and rugged configuration.

The fixed mounted Sunit e8 suits ideally to any In-vehicle application such as: cars, taxis, vans, trucks, busses, forklifts, commercial vehicles, utility vehicles, public safety vehicles, forest machines, road maintenance vehicles, harbor vehicles, earth movers, army vehicles, vessels and aircrafts.



Processor

Intel Mobile Pentium III 500 MHz processor
Extreme low 1.35-Volt Technology
Industrial Embedded Series

RAM Memory

128 MB RAM type SO-DIMM, expandable to 192 MB, 256 MB or 384 MB

Hard Disk Drive

Internal 20 GB slim line HDD, Processor & I2C controlled preheating and cooling

CD-ROM / DVD / CD-R drives

Options: Internal slim line CD-ROM drive, DVD drive or CD-R drive

Display

Separate TFT LCD Low-Temperature Poly-Silicon Display
8,4" SVGA, 800x600 pixels
Wide viewing angle
262 000 colors, C&T 6090 Graphic Chipset
Programmable 16-bit smart display unit
4 MB Video RAM
Full digital interface
High brightness 350 NIT
Automatic 100% Brightness adjustment controlled by environmental luminance
Internal 5W loudspeaker
PS2 plug for keyboard/mouse
Internal vibration and shock protection
Processor & I2C controlled preheating and cooling feature
Option: Touch screen

Navigation

Integrated GPS receiver, NMEA standard: VTG, RMC, GGA, GSA, GSV

Data communication

Option: Internal GSM / GPRS communication, Data, SMS with Standby feature when PC is not operating
COM1, USB

Audio

Standard PC audio
Integrated 5W Mono power amplifier
Integrated 2 x 30W Stereo power amplifier

Interfaces

COM1 external Dsub9, COM2 external 2-wire/touch screen, COM3 internal phone, COM4 internal GPS
Optional COM Ports through USB
2 x USB
2 x PS2 for keyboard and mouse
Option: 1 x external CAN accordingly to vehicle standard
GPS antenna
GSM antenna
Digital display interface
Audio stereo line out
Microphone input
Vehicle power connector: Power input, 4 x digital input, 5 x digital output, vehicle ignition
1 x PC/104+ on PCI-only Slot

Keyboard & Mouse

Std mini-AT keyboard with 86 buttons including WIN buttons, dust and drop water proof, keyboard store pocket
Glidepoint touch pad, dust and waterproof

Options

- Touch screen
- Lighted keyboard with integrated mouse,
- Small Hand Held Keyboard with lighted buttons, PS2 connector, function-, numeric and arrow buttons, Ctrl, Alt, Del, Enter and Esc buttons, Dashboard mounting bracket

Operating System

Windows® 95/98/2000, Windows® NT/XP, Linux Mandrake® 7.6

Battery

Internal rechargeable backup battery
Processor controlled battery charge

Power Supply

Operating voltage 12VDC
Computer unit's operating power consumption 12 W excluding display and heating
Internal filtrations of supply voltage's fluctuation and breaks according to vehicle standard

Power ON/OFF

Ignition controlled Auto Start and Stop Run
2 x general inputs (Ignition and alarm)
Phone call wakeup feature
Watchdog feature according to OS modes
Automatic programmable Stop Run feature according to Ignition
Programmable automatic Stop Run timing

Dimensions and Weights

Central Unit:
189 mm(w) x 61 mm(h) x 177,5 mm(d),
1.8 kg
CD-ROM / DVD / CD-R:
189 mm(w) x 19 mm(h) x 177,5 mm(d),
0.2 kg
Display Unit:
212 mm(w) x 180 mm(h) x 25/45 mm(d),
1.0 kg

Optional Equipment & Peripherals

Internal DGPS receiver
1 x external CAN according to vehicle standard
Internal GSM / GPRS data communication, Data, Audio, SMS
Integrated TV and RDS Radio receivers, PC 104 plus interface
Integrated Video input, high quality video-grabber card in PCI-Bus
Standard PC Audio features, GSM Audio for hand free, TV / Radio voice
Touch screen
CD-ROM, DVD or CD-R drive
Public TV monitoring
Peripherals as camera, video, printer etc

Mounting

Universal surface mounting Computer and Display casings

Chock and vibration

Shock and vibration protected Computer and Display unit

Corrosion protection

Internal humidity equalizer & corrosion protection inhibitors
Gold-plated conductors and couplers at corrosion critical contacts

Cold weather Start-Up

Quick automatic display and central unit preheating before start-up in extreme cold weather

Environmental Specs

Humidity 5 %...95 %
Operation Temperature -25°C to +55°C
Storage Temperature -40°C to +80°C
Shock, Non Operating 750 G / linear 1 ms
Shock, Operating 100 G / linear 2 ms
Vibration 4 G /all frequency spectrum

Electromagnetic compatibility (EMC)

Fulfills requirements of 95/54/EEC directive for ESA's radiated emissions
Based on draft EN 55022 (1997)

QA Methods

SAE J1939/11 (CAN)
DIN 40050 (IP)
IEC 68-2-38 2/Ad (TMP)
IEC 61000-4-2 (ESD)

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