TREK-755

Features

- 10.4" TFT LCD Display, 5 ~ 100% dimmable
- Rugged aluminum enclosure and fanless design
- VESA standard for flexible mounting kits
- IP65 dustproof and waterproof seals
- Compatible with Windows 98/2000/XP and Linux
- Embedded OS Support (WinCE .NET 4.2; XP Embedded)
- Flexible expansion capability for 802.11a/b/g, GPS, GPRS, CDMA, GSM
- Variable power source: 12 V, 24 V, 48 V DC and AC power supply
- Optional extreme temperature operating capability
- Optional sunlight readable capability

Introduction

TREK-755 is a fanless vehicle mounted computer that comes with a VIA® Eden™ low-power CPU for high reliability and performance. It is designed for applications in: depots, warehouses, transportation, agriculture, manufacturing, ports & container yards, distribution centers, shipyards, and lumberyards where it is mounted in electric vehicles.

The rugged die-cast aluminum enclosure replaces the fan as it helps TREK-755 dissipate heat. TREK-755 has a special design without ventilation holes that makes the front panel, back cover and sides comply with IP65/NEMA4, while the more exposed I/O ports have been placed in the bottom to protect against vertically falling water. TREK-755 can therefore be placed in harsh environments with dust and humidity. TREK-755 serves as a shockproof solution for rotating drive applications. With the installation of a solid state CompactFlash® card, TREK-755 can additionally offer shock and vibration proof data storage for critical industrial applications.

TREK-755 is designed to be used in both wireless and wide area networks with its expansion capabilities for 802.11b/g, GPS, GSM, or GPRS. In addition to Windows® 98, 2000 and XP, TREK-755 also supports embedded operating systems like Win CE .NET, WinXP Embedded, and Linux.

Specifications

- **CPU**   On-board VIA Eden 800 MHz CPU
- **System Memory**   Supports DDR 200/266 SDRAM up to 2 GB
- **SSD**   Supports one internal CompactFlash type II socket
- **HDD**   One IDE interface for 2.5" HDD
- **Network (LAN)**   10/100Base-T Ethernet interface
- **MiniPCI**   One type III A/B slot
- **Dimensions (W x H x D)**   310 x 255 x 80 mm
- **Weight**   3.5 kg

LCD Display

- **Display Type**   10.4" TFT LCD
- **Resolution**   SVGA 800 (H) x 600 (W)
- **Colors**   262 K
- **Pixel Pitch (mm)**   0.264 (H) x 0.264 (V)
- **Contrast Ratio**   500:1 Typ.
- **Viewing Angle (CR 10)**   60/60/35/65 (L/R/U/D)
- **Luminance**   230 nits with 5 ~ 100% dimmable brightness control
- **Lamp Life Time**   20,000 hours

Touch Screen (Optional)

- **Type**   Analog resistive   Vandal proof infrared
- **Light Transmission**   75%   91%
- **Controller**   RS-232 interface (COM4)   RS-232 interface (COM4)
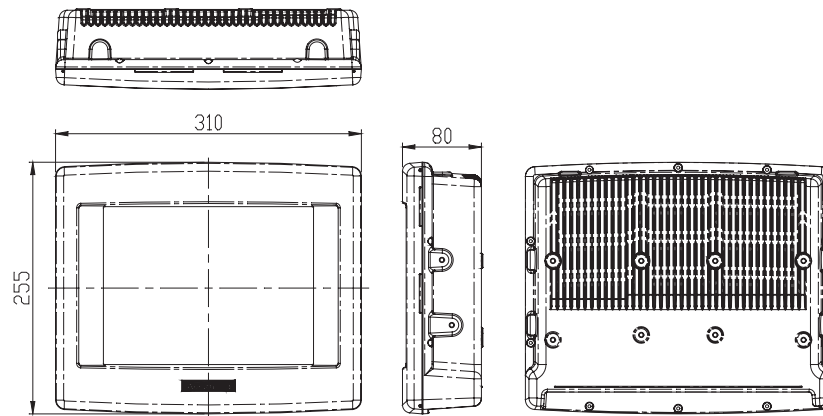- **Durability**   10 million   100,000 hrs

Power Supply

- **AC Model**
  Input voltage $100 \sim 240\ V_{AC}$, 50/60 Hz, 2 ~ 1.5 A

- **Default 24 V DC Model**
  Input voltage $19 \sim 36\ V_{DC}$

- **Optional 12 V DC Model**
  Input voltage $10 \sim 18\ V_{DC}$

- **Optional 48 V DC Model**
  Input voltage $40 \sim 58\ V_{DC}$

Environmental Specifications

- **Operating Temperature**   0 ~ 45° C (32 ~ 113° F)
- **Anti-freeze Operating**   -30 ~ 45° C (-22 ~ 113° F)
- **Relative Humidity**   10 ~ 95% @ 40° C, non-condensing
- **Shock**   30 G peak acceleration (11 ms duration)
- **EMC**   CE, FCC Class B
- **Safety**   UL, CUL, CE
- **Vibration**   1G

All product specifications are subject to change without notice   Last updated : 21-Oct-2005

Dimensions

Unit: mm

310

80

255

Ordering Information

Basic Series

- **TREK-755R-A0** — 10.4" LCD, DC 24 V, Eden 800 MHz, 256 MB, 40 GB HDD, Resistsive touchscreen
- **TREK-755R-CEA0** — 10.4" LCD, DC 24 V, Eden 800MHz, 128 MB, 64 MB CF, WinCE .NET 4.2, Resistive touchscreen
- **TREK-755R-XPEA0** — TREK-755R-A0 with Windows XP Embedded

Sunlight Readable Series

- **TREK-755V-SA0** — 10.4" transflective LCD, DC 24 V, Eden 800 MHz, 256 MB, 40 GB HDD, infrared vandal proof T/S
- **TREK-755V-SCEA0** — 10.4" transflective LCD, DC 24 V, Eden 800 MHz, 128 MB, 64 MB CF, WinCE .NET 4.2, Infrared vandal proof touchscreen
- **TREK-755V-SXPEA0** — TREK-755V-SA0 with Windows XP Embedded
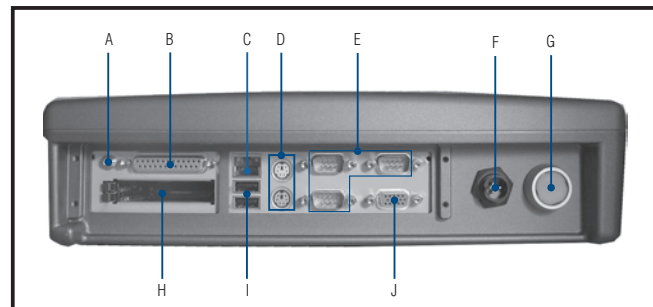
Anti-freeze Series

- **TREK-755R-FA0** — 10.4" LCD, DC 24 V, Eden 800 MHz, 256 MB, 20 GB HDD, Resistive touchscreen, heater
- **TREK-755R-FCEA0** — 10.4" LCD, DC 24 V, Eden 800 MHz, 128 MB, 64 MB CF, WinCE .NET 4.2, Resistive touchscreen, heater
- **TREK-755R-FXPEA0** — TREK-755R-FA0 with Windows XP Embedded

Note : Customized XPE installations are available.

Optional Items

- **TREK-UNIARM-01** — Universal arm for TREK-725/755/756
- **I/O-CV-01** — IP53 I/O cover for TREK-725/755/756
- **RAM-MOUNT-01** — VESA plate RAM mount with clamp base
- **RAM-MOUNT-02** — VESA plate RAM mount with 2.5" diameter base
- **RAM-MOUNT-03** — VESA plate RAM mount with clamp base
- **11 Mbps IEEE 802.11b compliant PCMCIA WLAN card**
  MLAN-3325A — PCMCIA WLAN Card for USA (Detachable antenna)
  MLAN-3325E — PCMCIA WLAN Card for Europe (Detachable antenna)
- **TREK-755 with AC power, 12 V DC or 48 V DC power (Production upon order)**
- **IEEE 802.11b/g MiniPCI or USB WLAN module**
- **GPS receiver module**

Fully Integrated I/O

A. Line out
B. SPP/EPP/ECP parallel port
C. 10/100Base-T Ethernet
D. PS/2 keyboard and mouse port
E. 3 serial ports:
   RS232 x 2
   RS232/422/485 x 1
F. DC power inlet (IP66)
G. Power switch (IP65)
H. PCMCIA Type II x 2 / Type III x1
I. 2 x USB v2.0 ports
J. VGA port