TREK-755

Features

- 10.4" TFT LCD, 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 (Win CE .NET 4.2; XP Embedded)
- Flexible expansion capability for 802.11a/b/g, GPS, GPRS, CDMA, GSM
- Flexible power source: Default 24 V_{DC}; with optional 12 V_{DC}, 48 V_{DC}
- 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, freezers, 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. Adopted with wide-temperature tolerance components and heating mechanism, TREK-755 can operate at -30 ~ 50° C.

Specifications

- **CPU**: Onboard 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**: 3.8 kg

LCD Display

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

Touchscreen (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

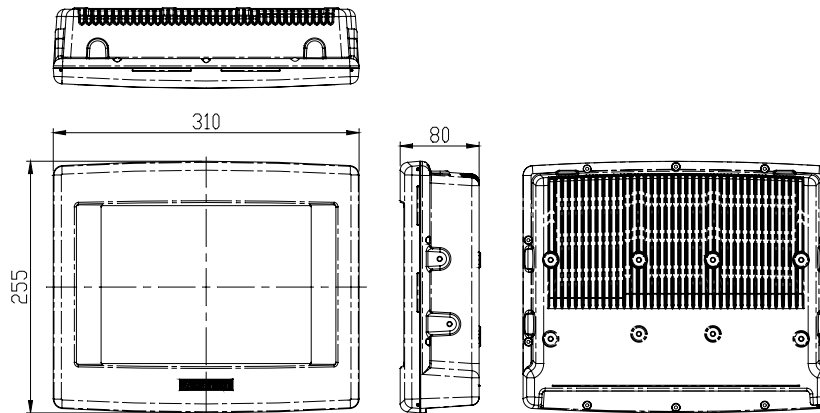### Power Supply

- **Default 24 V_{DC} Model**
  Input voltage   19 ~ 36 V_{DC}
- **Optional 12 V_{DC} Model**
  Input voltage   10 ~ 18 V_{DC}
- **Optional 48 V_{DC} Model**
  Input voltage   40 ~ 58 V_{DC}

Environmental Specifications

- **Operating Temperature**: 0 ~ 50° C
- **Anti-freeze Operating**: -30 ~ 50° C (-22 ~ 122° 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**: 1 G (operating with HDD); 3 G (operating with CF card)

Dimensions

Unit: mm

Ordering Information

Basic Models
- **TREK-755R-A0E** — 10.4", 24 V_{DC} Eden 800 MHz, 128 MB RAM, 128 MB CF, Windows CE .NET, Res. TS
- **TREK-755R-CEA0E** — 10.4", 24 V_{DC} Eden 800 MHz, 128 MB RAM, 128 MB CF, Windows CE .NET, Res. TS
- **TREK-755R-XPEA0E** — TREK-755R-A0E with XPE

Sunlight Readable Models
- **TREK-755V-SA0E** — TREK-755R-A0E with transflective LCD & IR vandal proof TS
- **TREK-755V-SCEA0E** — TREK-755R-CEA0E with transflective LCD & IR vandal proof TS
- **TREK-755V-SXPEA0E** — TREK-755R-XPEA0E with transflective LCD and IR vandal proof TS
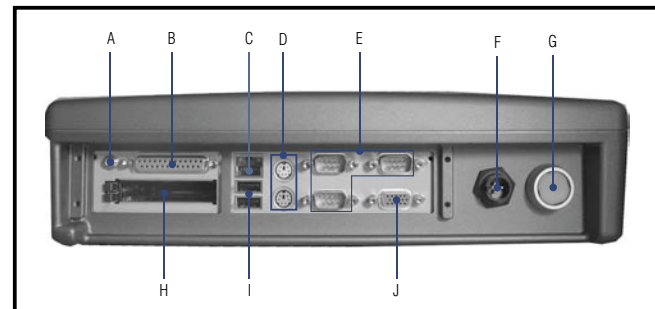
Anti-freeze Models
- **TREK-755R-FA0E** — Anti-freeze model with 2G wide temp. CF card
- **TREK-755R-FCEA0E** — TREK-755R-CEA0E Anti-freeze model
- **TREK-755R-FXPEA0E** — Anti-freeze model with XPE on 2G wide temp. CF card

Note : Customized XPE installations are available.

Optional Items
- **TREK-UNIARM-01** — Universal arm for TREK
- **I/O-CV-01** — IP53 I/O cover for TREK
- **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
- **11 Mbps IEEE 802.11b compliant PCMCIA WLAN card**
  - WLAN-325HAE — PCMCIA WLAN card for USA (detachable antenna, RoHS compliant)
  - WLAN-325HUE — PCMCIA WLAN card for Europe (detachable antenna, RoHS compliant)
- **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**
- **Optional GPS receiver module**
- **Optional quad band GSM/GPRS 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 x serial ports:
   2 x RS-232
   1 x RS-232/422/485

F. DC power inlet (IP66)
G. Power switch (IP65)
H. 2 x PCMCIA Type II / 1 x Type III
I. 2 x USB 2.0 ports
J. VGA port