

# tracer 3000

## Mobile Digital Video Recorder System



### Introduction

Engineered for Ritar spa, the leading vehicular DVR provider, tracer3000 makes the ultimate mobile solution on public transportations.

tracer3000 is specifically designed to withstand harsh environments, sustaining extreme shock and vibration conditions which are common to the all types of transportations.

The robust design of tracer3000 is certified by FCC Class B, CE, and e-mark (e13) which make this four-to-eight camera system perfect for use in bus, light rail transit systems, first response vehicles (e.g., police, fire, medical), and other fleet operations. Its industry-leading design standards provide excellent protection against vibration, shock, and EMI, and also make it ideal for harsh environments such as remote or industrial facilities.

### Features

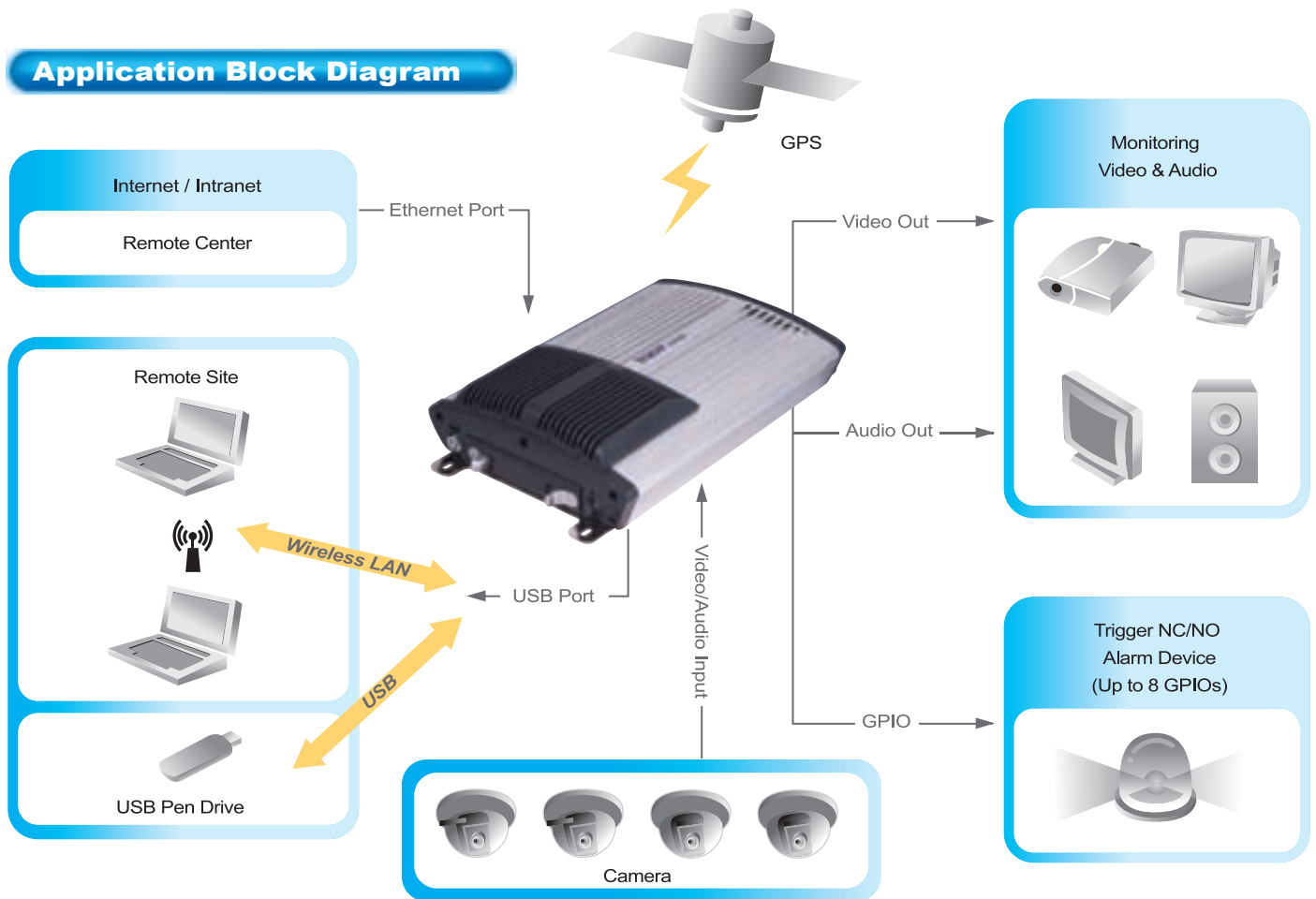
- Operates on vehicle's +12Vdc & +24Vdc power system
- Designed to withstand extreme shock and vibration conditions for various types of vehicles
- Industrial graded design combines with highly stable DirectSecu (Embedded Linux)
- Removable storage unit allowing retrieval for desktop PCs
- High quality multi mode real time recording
- Optional GPS and WLAN for various integrations
- Extensive scenarios engines for various event triggered actions (motion, panic button, etc.)
- Multi-layers password protection
- Robust file system to prevent abnormal shutdown
- Wireless transmission for remote viewing, control, backup and event notifications

#### Easy Data Backup Via Removable Hard Drive



IR Remote Controller Support

## Application Block Diagram



- . Recorded Video Playback
- . Backup Archives
- . Real Time Video Monitor via Internet / Intranet
- . Real Time Coordinate Management (Optional)
- . Remote Access / Control tracer3000 System Setting

## Application

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Police Car            | <input checked="" type="checkbox"/> Patrol Wagon     |
| <input checked="" type="checkbox"/> Cash Carrier          | <input checked="" type="checkbox"/> Ambulance        |
| <input checked="" type="checkbox"/> Public Transportation | <input checked="" type="checkbox"/> Ferry            |
| <input checked="" type="checkbox"/> Fire Engine           | <input checked="" type="checkbox"/> Utility Vehicles |

## Specifications

### General

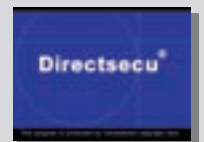
- Power Inquiry : +12Vdc/5A & +24Vdc/3A
- Dimensions (W x H x D): 174 x 49 x 257mm (6.85" x 1.89" x 11.1")
- Net Weight : 4.2kg
- Operating temperature : 0 ~ 45°C (32~113°F)
- Relative humidity : 10 ~ 90% @ 40°C, non-condensing
- Shock : 6G (operating), 10G (storage/transit)
- Random Vibration : 1.0G, 5 ~ 300Hz
- Certification : CE, UL, FCC class-B, e-mark (e13)

### Video

- Video Standard : Studio quality (scanning frequency 13.5MHz), CCIR / PAL and EIA / NTSC
- Resolution : 320 (H) x 240 (V) pixels or 640 (H) x 240 / 480 (V) pixels
- Compression : Motion-JPEG format
- Inputs : 4 or 8 x (F) BAS (BNC sockets)
- Outputs Optional : 1 x VGA output for recorded pictures with multi-picture display
- Total recording rate for multiplex recording : 100fps (Frame per second)

### Software

- Operation System : Embedded Linux (use Giantec DirectSecu)
- Application Software : DirectSecu
- System Setup : Local installation
- I/O Control : Setup of user rights, multi user password, and camera exception lists
- Recording Type : Permanent (continuous) or event triggered (Motion Detection) or schedule recording



## Remote Management

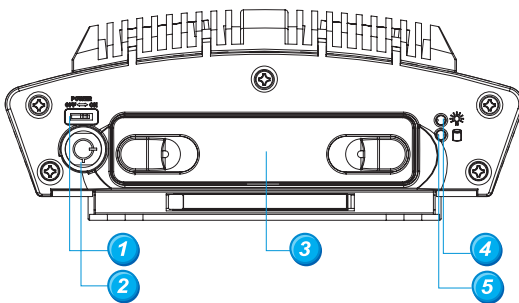
Via Microsoft IE Browser



Via Remote Control Center (RCC)

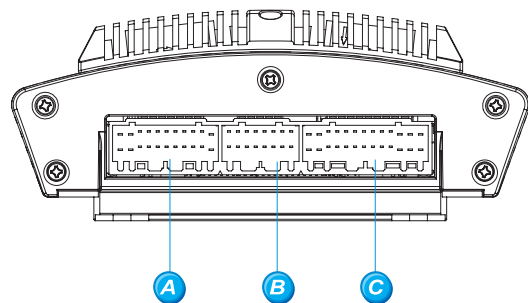


Front View



- 1** Power ON/OFF Switch
- 2** Key Lock for HDD
- 3** Removable Hard Drive
- 4** Power LED
- 5** Hard Disk LED

Rear View



- A** Power In  
COM1  
COM2  
IR / LAN
- B** USB X2  
VGA  
Line Out
- C** Video Input  
GPIO  
Audio In  
Line In  
MIC In

### Playback

- Multitasking : Parallel playback to recording either locally or via network
- Multi-picture Display : Display 1, 4 or 9 video windows simultaneously
- Decompression : Software decompression, decompression total rate 100fps
- Picture Export : Single pictures as JPEG or BMP file as well as into the Windows clipboard
- Search Criteria : By date / time / camera / events

### Processor

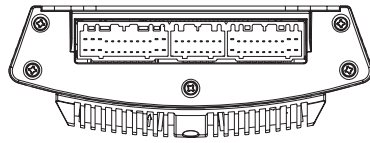
- Processor : Mobile Celeron CPU
- DRAM : On board 128M SDRAM

### Storage

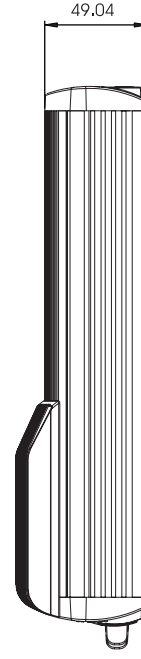
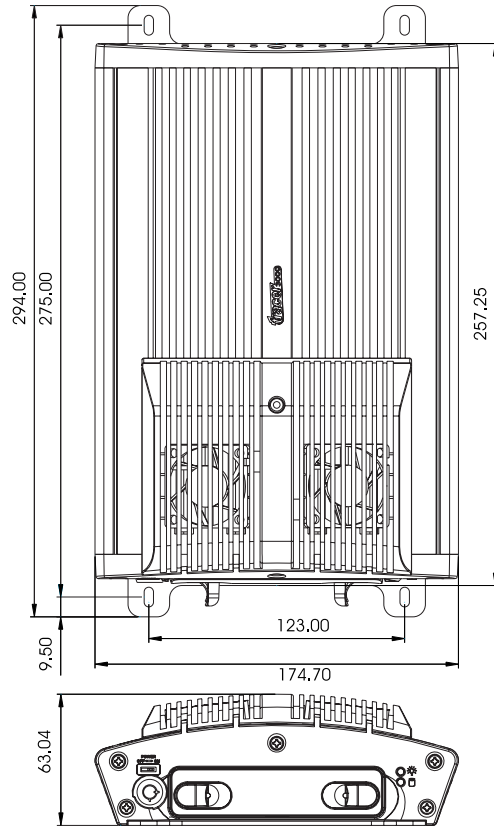
- Direct Recording : One removable 2.5" hard disk up to 80GB
- Data Backup : Through USB Pen Drive, or via network to client PC for backup archives

### Interface

- Serial : 2 x RS232 (COM1, COM2)
- VGA : 1 x VGA port
- Ethernet : 1 x 10/100base-T Ethernet port
- GPIO : 8 x General purpose input / output (tracer3004), 6 x General purpose input / output (tracer3008)
- USB : 2 x USB ports
- Audio In : 4 channels (tracer3004)  
2 channels (tracer3008)
- Audio Out : 1 channel
- IR : 1 x Infrared



(unit:mm)



TR3004: 4 Channels Mobile Digital Video Recorder with Mobile Celeron 650MHz CPU, 128MB SDRAM  
 TR3008: 8 Channels Mobile Digital Video Recorder with Mobile Celeron 650MHz CPU, 128MB SDRAM

**DR-25:** Removable 2.5" HDD Tray for TR3004 / TR3008

**DRB-25:** 3.5" HDD Tray Converter for Desktop PC

**Cable Kit-4:** Evaluation Cable Kit for TR3004

**Cable Kit-8:** Evaluation Cable Kit for TR3008

**USBWLAN-STICK11:** USB Wireless LAN Module

**USBGPS-MG30U:** USB GPS Receiver Module

ZZ-DS0507-TR30E02