

# TITAN VM Series *Ruggedized Panel PC*

ruggedized

www.kaspro-group.com



The Titan is a compact rugged vehicle or stationary-mount panel PC available in a wide variety of configurations. Depending on the intended application, the Titan VM can be equipped with either an 8.4 or 10.4-inch display. Resolutions range from VGA (640 x 480) to SVGA (800 x 600) to XGA (1024 x 768). A 5-wire resistive touch screen is standard, but we do offer an optional infrared screen in addition to anti-reflective protective glass.

On the processor side, there are essentially three versions available with Celeron M or Core Duo processors and the Intel

945GME/ICH7M chipset, one with Celeron M and the 855GME/ICH4 chipset, and an AMD-based solution with the Geode LX-800 and the CD5536 chipset. Why all those choices?

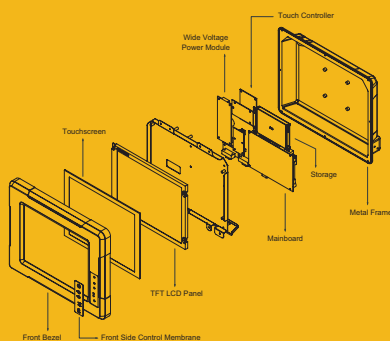
Because the TITAN VM rugged panels can be configured either as standard Windows XP machines or as embedded systems running Windows XP Embedded or Windows CE. Linux as an option is also available.

The compact, fanless TITAN VM panels have a footprint of 10.9 x 8.65 inches and are a bit 2 inches thick. Their aluminum housing has undergone anti-corrosion treatment and carries a full IP65 sealing rating, except the downward-facing I/O connector panel. The Titan panel can handle severe vibration and shock as well as operation in high humidity of extreme temperatures.

Onboard connectivity consists of two USB 2.0 ports, a RS232/422/485 connector, video, two Ethernet RJ45 jacks with optional gigabit speed, microphone and headphone jacks in some units, and a legacy PS/2 port. Power is standard 12 Volt DC, with wide range 8 to 36 Volt available. Wireless connectivity can be added via optional mini-PCI modules.

TITAN VM panels can be mounted either via standard VESA mount brackets or special and are suitable for a very wide range of industrial and commercial applications.

#### Modularized Construction



#### Features :

- AMD LX800 500MHz, Intel Atom N270, Intel Celeron M1.0GHz, Core 2 Duo 1.06GHz
- 8.4" and 10.4" TFT Touchscreen Display options / 262,144 Colors
- Full IP65 Protection (Except I/O parts)
- Aluminum Housing (Incl. Anti-Corrosion Treatments)
- Anti-Shock / Vibration Standard (MIL810F & IEC60068-2-27)
- 2 USB, 1xPS/2, 2xRJ45 (10/100Mbps), 1xRS232/422.485

802.11b/g Wireless LAN with Antenna(Optional)

Wide Range 8 to 36V DC Input Acceptable(Optional)

Transflective Sunlight Readable(Optional)



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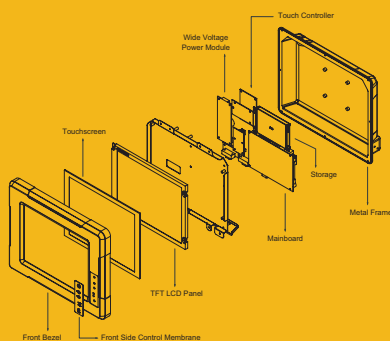
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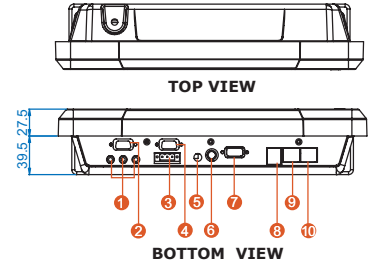
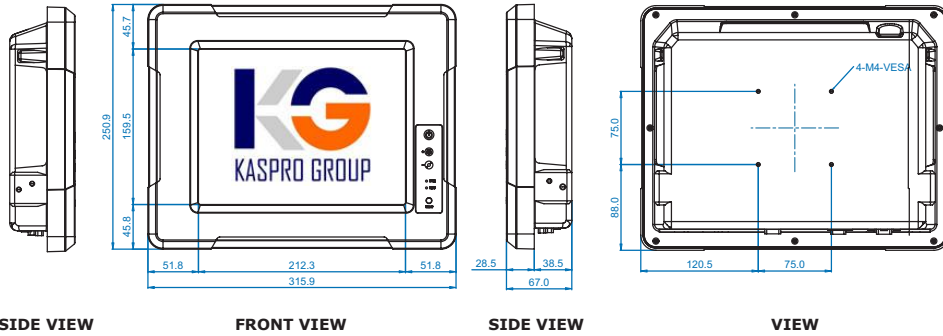
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Transflective Sunlight Readable(Optional)

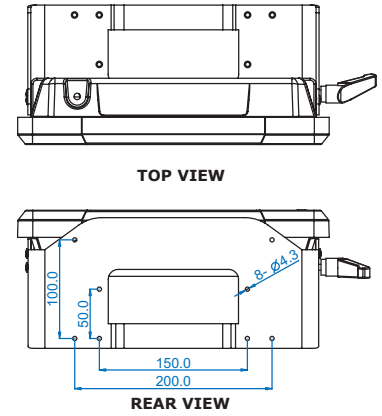
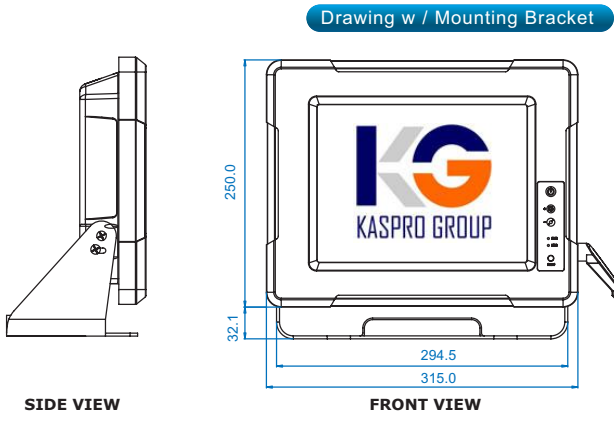


## TITAN-104VM Series

### Ruggedized Panel PC



1. Line in, Line out, Micro in
2. COM2 (optional)
3. DC Terminal Block (optional)
4. COM1
5. DC Lockable Input (Default)
6. PS/2
7. VGA
8. USB 1.2
9. LAN1
10. LAN2



Measurements shown in mm / All Dimensions are  $\pm 0.5$  mm

\* Note: this is a simplified drawing and some components are not marked in detail. Please contact our sales representative if you need further product information.

#### Display choices / Order codes

Pixel Number	Contrast Ratio	Brightness	Order codes:
800 x 600	500:1	220 cd/m	code: s1
800 x 600	500:1	400 cd/m	code: s2
800 x 600	250:1	350 cd/m	code: s3
640 x 480	500:1	400 cd/m	code: s4
1024 x 768	400:1	300 cd/m1	code: s5

#### Mechanical and Environment

Dimensions (W x L x H)	: 315 mm x 250 mm x 67mm
Power Input	: 12V DC w/ lockable connector
Power Consumption	: 35W typ.
Operating Temperature	: -10 deg.C to 55 deg.C
Operating Humidity	: 10% to 95% (non condensing)
Mounting	: VESA mount, Vehicle mount
Shock *	: Operating: 30g for 18ms, 300m/s <sup>2</sup>
Vibration *	: Operating: 1.60/1.96/2.18 g rms for XYZ / 5-500Hz

\* When use SSD or Industrial Compact Flash

#### I/O Connectors

Back Panel I/O Port	: 2 x RJ-45(10/100 Mbps, Optional GigaLAN)
	: 1 x PS/2
	: 1 x VGA(DB-15)
	: 1 x DC-in Jack(Lockable)
	: 2 x USB 2.0
	: 1 x RS232, 1 x RS232/422/485(Optional)
	: Line in, Line out, Micro in
Expansion Slot	: 1 x Mini PCI, 1 x CF

#### Certifications

CE  
FCC ClassB  
MIL810F/IEC60068-2-27 for Vibration /Shock

#### Processor Choice

CPU Order code 1	: AMD Geode LX-800 500MHz CPU
CPU Order code 2	: Intel Atom N270
CPU Order code 3	: Intel Core Duo
CPU Order code 4	: Intel Celeron M 1.0 Ghz.

#### Packing List

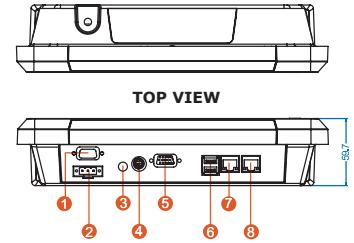
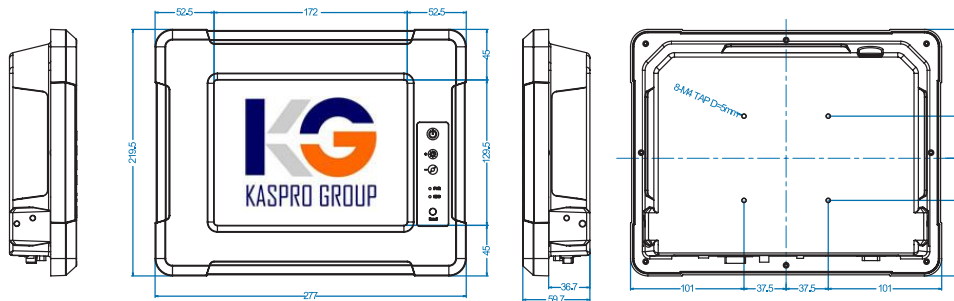
Mounting Bracket and Kits	One robust bracket with locking handle (Can adjust from -5deg. to 90deg.)
Wide Temperature	NA
Operation System	Windows XP embedded, Windows XP, Windows CE 5.0, Linux 2.6.11
Storage	2.5" Automobile 40G HDD, 2.5" 4G Flash Disk (SSD), 4G Industrial Compact Flash Card
Touch/ Anti-reflective Glass	Infrared Touchscreen, 3mm Anti-reflective Protection Glass
Giga LAN	Available for 10/100/1000 Mbps Giga LAN
WLAN	Mini PCI base Wireless LAN card with SMA antenna
Wide Power Input Range	8V to 36V wide range acceptable for optional
Terminal Block	Pluggable 3pin terminal block power input

#### Display and Storage

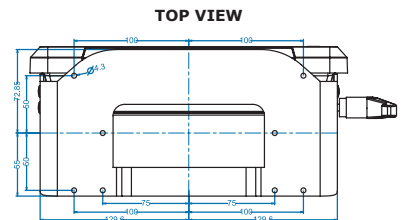
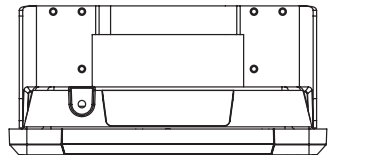
Size	: 10.4 inch
Touch (Optional)	: 5 Wire Resistive / IR Touch
Storage	: 2.5" 40G HDD

## TITAN-84VM Series

## Ruggedized Panel PC



- 1.COM1
- 2.DC Terminal Block (optional)
- 3.DC Lockable Input (Default)
- 4.PS/2
- 5.VGA
- 6.USB 1.2
- 7.LAN1
- 8.LAN2



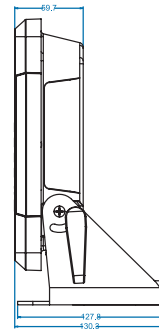
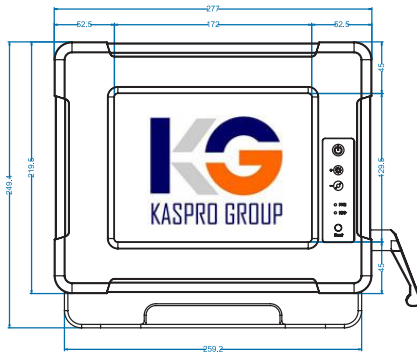
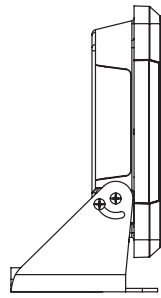
SIDE VIEW

FRONT VIEW

SIDE VIEW

VIEW

Drawing w / Mounting Bracket



SIDE VIEW

FRONT VIEW

SIDE VIEW

Measurements shown in mm / All Dimensions are  $\pm 0.5$  mm

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### TFT Screen Choices

Pixel Number	Contrast Ratio	Brightness	Order codes:
800 x 600	500:1	220 cd/m	code: s1
800 x 600	500:1	400 cd/m	code: s2
800 x 600	250:1	350 cd/m	code: s3
640 x 480	500:1	400 cd/m	code: s4
1024 x 768	400:1	300 cd/m	code: s5

### Processor Choices

PC Order code 1	: AMD Geode LX-800 500MHz CPU
PC Order code 2	: Intel Atom N270
PC Order code 3	: Intel Core Duo
PC Order code 4	: Intel Celeron M 1.0 Ghz.
System Memory	: 1 x SODIMM, Max 1GB DDR 400
LAN Controller	: Realtek RTL8100c Chipset, 10/100 Mbps
Storage	: 4G Compact Flash Card
Expansion Slot	: 1 x Mini PCI, 1 x CF

### I/O Connectors

Back Panel I/O Port	: 2 x RJ-45(10/100 Mbps,Optional GigaLAN), 1 x PS/2, 1 x VGA(DB-15), 1 x DC-in Jack(Lockable), 2 x USB 2.0, 1 x RS232/422/485, WLAN antenna SMA in top (Optional)
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### In front Control

Control Button	: Power On/ Off Reset Brightness Up Brightness Down
LED indicator	: Power On/ Off HDD Status

### Mechanical and Environment

Dimensions (W x L x H)	: 277 mm x 219.5 mm x 59.7 mm
Power Input	: 12V DC w/ lockable connector
Power Consumption	: 27.5W typ.
Operation Temperature	: -10 deg.C to 55 deg.C
Operation Humidity	: 10% to 95% (non condensing)
Shock*	: Operating:30g for 18ms, 300m/s <sup>2</sup>

\* When use Industrial Compact Flash

### Certifications

CE  
FCC ClassB  
MIL810F/ IEC60068-2-27 for Vibration /Shock

### Product Optional Items

Mounting Bracket and Kits	One robust bracket with locking handle (Can adjust from -5deg. to 90deg.)
Sunlight Readable	Transflective film enhancement for optional
Wide Temperature Range	N/A
Operation System	Windows XP embedded, Windows XP, Windows CE 5.0, Linux 2.6.11
Storage	4G Industrial Compact Flash Card
Anti-reflective Glass	3mm Anti-reflective Protection Glass (w/o Touch)
Giga LAN	Available for 10/100/1000 Mbps Giga LAN
WLAN	Mini PCI base Wireless LAN card with SMA antenna
Wide Power Input Range	8V to 36V wide range acceptable for optional
Terminal Block	Pluggable 3pin terminal block power input