G-WIN®

ruggedized

WINMATE

G-WIN
Rugged PPC / Display
Sales Kit

Sept. 2010

Product Feature

- Rugged Aluminum Casing with Anti-Corrosion and Fanless Design
- IP65 Dustproof and Waterproof Protection (Except I/O parts)
- Wide Range 9V to 36V Isolation DC Power Input
- Wide Range Operating Temperature: -25 ~ +60℃
- Compliance With MIL810F & EN50155 Standard







G-WIN® Rugged PPC Solution

Rugged PPC



8.4" touch PPC
- R08I33S-VMT1
  800 x 600
- R08I33S-VMM1
  640 x 480
- R08I33S-VMM2
  1024 x 768

- Core2 Duo/ Celeron M 1.06GHz CPU
- Intel 945GME

10.4" touch PPC
- R10I33S-VMM3
  1024 x 768
- R10I33S-VMP1
  800 x 600

- Core2 Duo/Celeron M 1.06GHz CPU
- Intel 945GME

12.1" touch PPC
- W12I33S-VMM5
  1280 x 800
  (Developing)

- Core2 Duo/ Celeron M 1.06GHz CPU
- Intel 945GME

15" touch PPC
- R15I33S-VMM5HB
  1024 x 768
- R15I33S-67M5HB
  1024 x 768
- R15I33S-VMA2
  1024 x 768

- Core2 Duo/ Celeron M 1.06GHz CPU
- Intel 945GME

7" touch PPC
- W07I93S-VMA4
  800 x 480

- Atom Z510/Z530 CPU
- Intel US15W

8.4" touch PPC
- R08IA3S-VMT1
  800 x 600
- R08IA3S-VMM1
  640 x 480
- R08IA3S-VMM2
  1024 x 768

- Atom N270 CPU
- Intel 945GSE

10.4" touch PPC
- R10IA3S-VMM3
  1024 x 768
- R10IA3S-VMP1
  800 x 600

- Atom N270 CPU
- Intel 945GSE

12.1" touch PPC
- W12IA3S-VMM5
  1280 x 800
  (Developing)

- Atom N270 CPU
- Intel 945GSE

15" touch PPC
- R15IA3S-VMM5HB
  1024 x 768
- R15IA3S-67M5HB
  1024 x 768
- R15IA3S-VMA2
  1024 x 768

- Atom N270 CPU
- Intel 945GSE

Rugged Display Solution

Rugged LCD Display



7” LCD
W07L100-VMA4
800 x 480

8.4” LCD
R08L100-VMM2
1024 x 768

8.4” LCD
R08T200-VMT1
800 x 600

8.4” LCD
R08T200-VMM1
640 x 480

10.4” LCD
R10L600-VMM3
1024 x 768

10.4” LCD
R10L100-VMP1
800 x 600

12.1”W LCD
W12L600-VMM5
1280 x 800

15” LCD
R15L100-VMA2
1024 x 768
(LED back light)

15” LCD
Full IP67
R15L100-67M5HB
1024 x 768

15” LCD
Military Grade
R15L100-MLM5HB
1024 x 768

Design Concept









WLAN

WWAN



Rugged PPC

WWAN





Internet



WLAN



Application

Delivering better product for more harsh environment applications

Target Market

- Transportation
- Industrial Automation
- Utility & Energy Management
- Machinery/ Heavy Vehicles
- Mining, Marine & Off-shore
- Logistics / Warehousing
- Fleet Management
- Outdoor Technician
- Ports/Airport

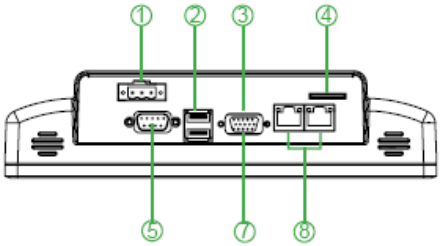


Benefit

- Energy saving and high performance platform design.
- Increase visibility with real-time information.
- Offers vehicle positioning services via wireless network.
- Reduce delivery cycle time and overall operating cost.

G-WIN® 7” Rugged PPC





1. DC input
2. USB
3. VGA
4. SIM
5. COM
6. VGA
7. LAN

Model: **W07I93S-VMA4**

I931

Display Features:
- 7” TFT LCD
- 800 x 480 resolution
- 400 cd/m Brightness

System I/O Ports:
- 1 x Reset Switch
- 1 x RS-232
- 1 x DC-input (terminal block)
- 1 x PS/2
- 1 x VGA
- 2 x USB
- 2 x RJ-45

CPU Board Feature:
- Atom Z510/Z530 1.1GHZ/1.6GHz CPU
- Intel US15W
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 256MB

Optional information:
- 3G module
- Memory: DDR2 SO-DIMM up to 2GB
- Storage: Mini PCIe PATA SSD
- Touch screen/Glass Transflective
- OS:
  - Windows Xpe
  - Windows XPPe
  - Windows XP
  - Windows 7
  - CE
  - Linux

G-WIN® 8.4” Rugged PPC

R08IXXS-VMM2



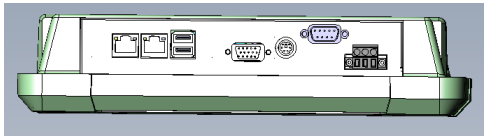
R08IXXS-VMT1

R08IXXS-VMM1

Display Features:
- 8.4” TFT LCD
- 1024 x 768 resolution
- 300 cd/m Brightness

Display Features:
- 8.4” TFT LCD
- 800 x 600 resolution
- 450 cd/m Brightness

Display Features:
- 8.4” TFT LCD
- 640 x 480 resolution
- 400 cd/m Brightness



System I/O Ports:
- 1 x RS-232
- 1 x DC Terminal Block
- 1 x PS/2
- 1 x VGA
- 2 x USB
- 2 x RJ-45

I330

CPU Board Feature:
- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:
- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

Optional information:
- I330 CPU: U7500 / Celeron M 423
- WLAN 802.11b/g
- Memory: DDR2 SO-DIMM up to 2GB
- Storage: CF card
- Touch screen/Glass Transflective
- OS:
  - Windows Xpe
  - Windows XPPe
  - Windows XP
  - Windows 7
  - CE
  - Linux

G-WIN® 10.4” Rugged PPC

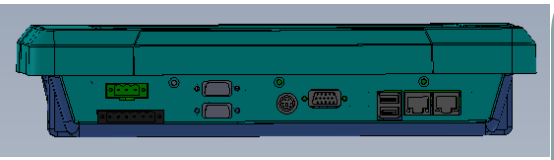


Model: **R10IXXS-VMM3**

Display Features:
- 10.4” TFT LCD
- 1024 x 768 resolution
- 370 cd/m Brightness

Model: **R10IXXS-VMP1**

Display Features:
- 10.4” TFT LCD
- 800 x 600 resolution
- 500 cd/m Brightness



System I/O Ports:
- 1 x RS-232
- 1 x RS-232/422/485
- 1 x DC-input Terminal Block
- 1 x PS/2
- 1 x VGA
- 2 x USB
- 2 x RJ-45

I330

CPU Board Feature:
- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:
- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

Optional information:
- I330 CPU: U7500 / Celeron M 423
- WLAN 802.11b/g
  3G module
  (either one)
- Digital I/O (4-in, 4-out)
  CAN Bus (2-ch)
  (either one)
- Memory:
  DDR2 SO-DIMM up to 2GB
- Storage:
  CF card
  2.5” SSD
  (either one)
- RS-232/422/485 port
- Touch screen/Glass Transflective
- OS:
  Windows Xpe
  Windows XPPe
  Windows XP
  Windows 7
  CE
  Linux

G-WIN®

ruggedized

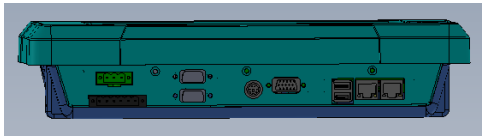
12.1” W Rugged PPC



Model: **W12IXXS-VMM5**

Display Features:

- 12.1” TFT LCD
- 1280x 800 resolution
- 1000 cd/m Brightness



System I/O Ports:

- 1 x RS-232
- 1 x RS-232/422/485
- 1 x DC-input Terminal Block
- 1 x PS/2
- 1 x VGA
- 2 x USB
- 2 x RJ-45

I330

CPU Board Feature:

- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:

- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

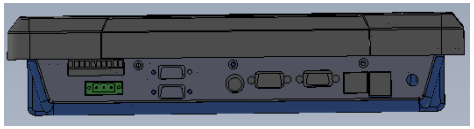
Optional information:

- I330 CPU: U7500 / Celeron M 423
- WLAN 802.11b/g
  3G module
  (either one)
- Digital I/O (4-in, 4-out)
  CAN Bus (2-ch)
  (either one)
- Memory:
  DDR2 SO-DIMM up to 2GB
- Storage:
  CF card
  2.5” SSD
- RS-232/422/485 port
- Touch screen/Glass Transflective
- OS:
  Windows Xpe
  Windows XPPe
  Windows XP
  Windows 7
  CE
  Linux

G-WIN®

15” Rugged PPC





Model: **R15IXXS-VMM5HB**

Display Features:
- 15” TFT LCD
- 1024 x 768 resolution
- 800 cd/m Brightness

Model: **R15IXXS-VMA2**

Display Features:
- 15” TFT LCD
- 1024 x 768 resolution
- 350 cd/m Brightness
- LED back Light

System I/O Ports:
- 1 x RS-232
- 1 x RS-232/422/485
- 1 x DC-input terminal block
- 1 x PS/2
- 1 x VGA
- 2 x USB
- 2 x RJ-45

I330

CPU Board Feature:
- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:
- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

Optional information:
- I330 CPU: U7500 / Celeron M 423
- WLAN 802.11b/g
  3G module
  (either one)
- Digital I/O (4-in, 4-out)
  CAN Bus (2-ch)
  (either one)
- Memory:
  DDR2 SO-DIMM up to 2GB
- Storage:
  CF card
  2.5” SSD
- RS-232/422/485 port
- Touch screen/Glass Transflective
- OS:
  Windows Xpe
  Windows XPPe
  Windows XP
  Windows 7
  CE
  Linux

G-WIN®

15” Military Grade PPC





Test item	R15IA3S-MLM5
MIL-STD-810F *Vibration	V
MIL-STD-810F *Shock	V
MIL-STD-810F Humidity	V
MIL-STD-810F Drop(Package)	V
MIL-STD-810F High temperature	V
MIL-STD-810F Low temperature	V

Model: **R15IXXS-MLM5HB**

Display Features:

- 15” TFT LCD
- 1024 x 768 resolution
- 800 cd/m Brightness

System I/O Ports:

- 1 x RS-232
- 1 x DC Power input
- 1 x VGA
- 2 x USB
- 1 x RJ-45

I330

CPU Board Feature:

- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:

- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

Optional information:

- I330 CPU: U7500 / Celeron M 423
- WLAN 802.11b/g
- 3G module (either one)
- Storage:
  - CF card
  - 2.5” SSD
- Touch screen/Glass Transflective
- OS:
  - Windows Xpe
  - Windows XPPe
  - Windows XP
  - Windows 7
  - CE
  - Linux

G-WIN®

15” IP67 Grade PPC





Model: **R15IXXS-67M5HB**

Display Features:

- 15” TFT LCD
- 1024 x 768 resolution
- 800 cd/m Brightness

System I/O Ports:

- 1 x RS-232
- 1 x DC Power input
- 1 x VGA
- 2 x USB
- 1 x RJ-45

Standard Cable(1.8M)	IP 67 side
Power	3 pin
USB	10 pin
RS232	10 pin
LAN	10 pin

I330

CPU Board Feature:

- Intel Core 2 Duo / Celeron M 1.06GHz
- Intel 945GME
- 1GB DDR2 400/533/667 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

IA30

CPU Board Feature:

- Atom N270 1.6GHz CPU
- Intel 945GSE
- 1GB DDR2 400/533 SO-DIMM (max. 2GB)
- Dual Gigabit LAN controller
- Share memory max. 224MB

Optional information:

- WLAN 802.11b/g
  3G module
  (either one)
- Storage:
  CF card
  2.5” SSD
- Touch screen/Glass
  Transflective
- Optical Bonding
- OS:
  Windows Xpe
  Windows XPPe
  Windows XP
  Windows 7
  CE
  Linux

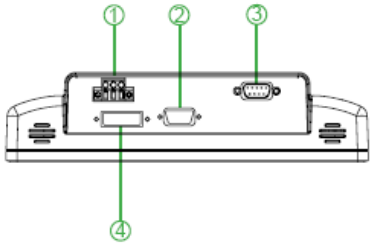
G-WIN® 7” Rugged Display

7”



Model: **W07L100-VMA4**

Display Features:
- 7.4” TFT LCD
- 800 x 480 resolution
- 370 cd/m Brightness



1. DC input
2. VGA
3. COM
4. DVI

7” I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x DC-input (terminal block)
- 1 x VGA
- 1 x DVI

Model: **R08T200-VMT1**

Display Features:
- 8.4” TFT LCD
- 1024 x 768 resolution
- 300 cd/m Brightness

Model: **R08T200-VMM1**

Display Features:
- 8.4” TFT LCD
- 800 x 600 resolution
- 450 cd/m Brightness

Model: **R08L100-VMM2**

Display Features:
- 8.4” TFT LCD
- 640x 480 resolution
- 400 cd/m Brightness

8.4” I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x Power Jack
- 1 x DC Terminal Block
- 1 x Line-in
- 1 x VGA
- 1 x S-Video
- 1 x Composite

Optional information:
- Touch screen/Glass Transflective

8.4” Rugged Display



Model: **R08T200-VMT1**

Display Features:
- 8.4” TFT LCD
- 1024 x 768 resolution
- 300 cd/m Brightness

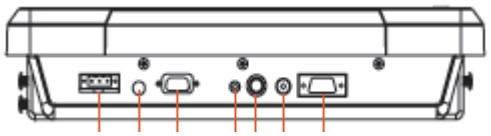
Model: **R08T200-VMM1**

Display Features:
- 8.4” TFT LCD
- 800 x 600 resolution
- 450 cd/m Brightness

Model: **R08L100-VMM2**

Display Features:
- 8.4” TFT LCD
- 640x 480 resolution
- 400 cd/m Brightness

Optional information:
- Touch screen/Glass Transflective

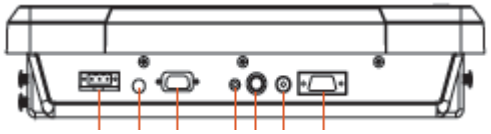


8.4” I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x DC Terminal Block
- 1 x Line-in
- 1 x VGA
- 1 x S-Video
- 1 x Composite

G-WIN®

10.4” & 12.1”W Rugged Display





10.4”

Model: **R10L100-VMM3**

Display Features:
- 10.4” TFT LCD
- 1024 x 768 resolution
- 370 cd/m Brightness

Model: **R10L600-VMP1**

Display Features:
- 10.4” TFT LCD
- 800 x 600 resolution
- 500 cd/m Brightness

10.4” I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x DC Terminal Block
- 1 x Line-in
- 1 x VGA
- 1 x S-Video
- 1 x Composite

12.1” W

Model: **W12L600-VMM5**

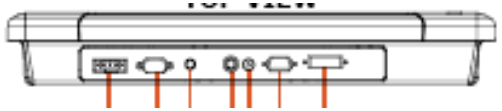
Display Features:
- 12.1” W TFT LCD
- 1280 x 800 resolution
- 1000 cd/m Brightness

12.1”W I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x DC Terminal Block
- 1 x Line-in
- 1 x VGA
- 1 x S-Video
- 1 x Composite

Optional information:
- Touch screen/Glass Transflective

15” Rugged Display





Model: **R15L100-VMA2**

Display Features:
- 15” TFT LCD
- 1024 x 768 resolution
- 350 cd/m Brightness
- LED back light

I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x DC Terminal Block
- 1 x Line-in
- 1 x VGA
- 1 x S-Video
- 1 x Composite

Optional information:
- Touch screen/Glass Transflective

15” Military Grade Display





Model: **R15L100-MLM5HB**

Display Features:
- 15” TFT LCD
- 1024 x 768 resolution
- 800 cd/m Brightness

I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x Power Jack
- 1 x VGA

Optional information:
- Touch screen/Glass Transflective

Test item	R15IA3S-MLM5
MIL-STD-810F *Vibration	V
MIL-STD-810F *Shock	V
MIL-STD-810F Humidity	V
MIL-STD-810F Drop(Package)	V
MIL-STD-810F High temperature	V
MIL-STD-810F Low temperature	V

G-WIN®

15” IP67 Grade Display

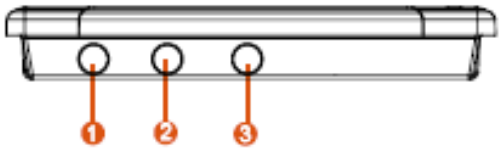


Model: **R15L100-67M5HB**

Display Features:
- 15” TFT LCD
- 1024 x 768 resolution
- 800 cd/m Brightness

Optional information:
- Touch screen/Glass Transflective
- Optical Bonding

I/O Ports:
- 1 x RS-232 (for Touch)
- 1 x Power Jack
- 1 x VGA



BOTTOM VIEW

1.power
2.VGA
3.RS232 or USB

Standard Cable(1.8M)	IP 67 side
Power	3 pin
USB	10 pin
RS232	10 pin

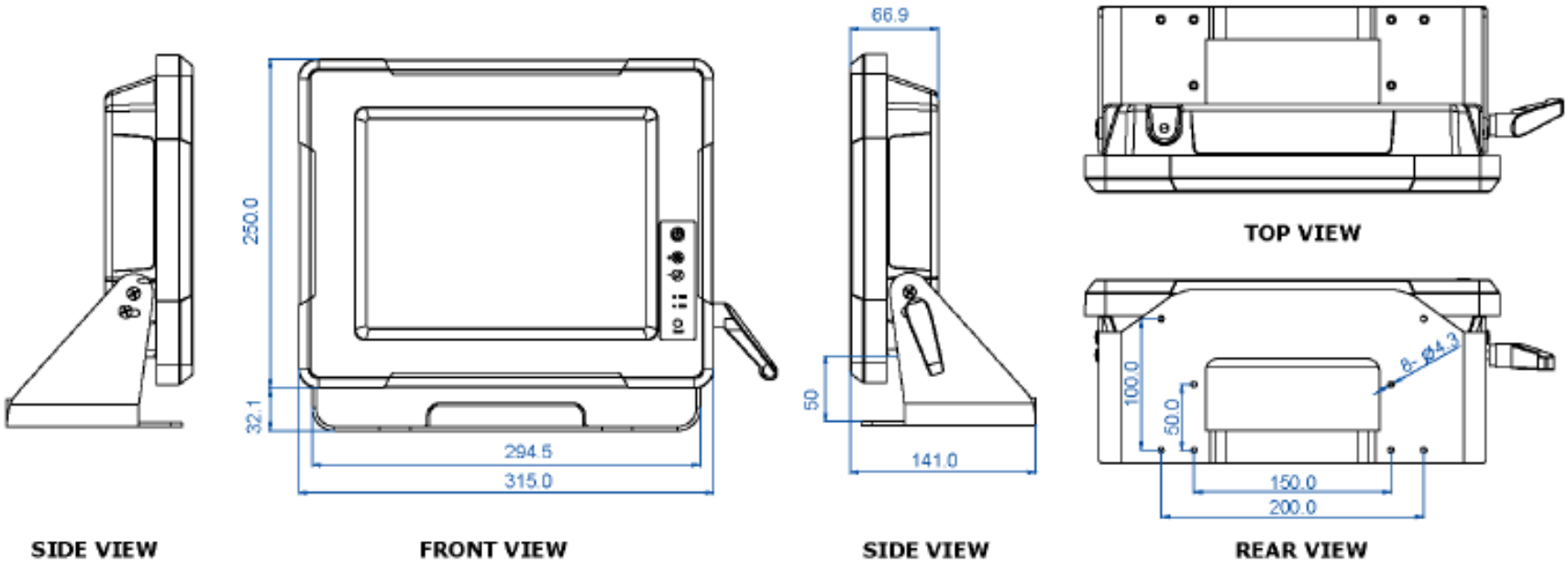
PPC Optional Information

Product	Panel size	Model Name	Default				Optional								
			Isolation Power (9~36V)	Storage 4G CF	RS-232 (1 port)	Operating Temp. (℃) (-25~60)	SBC IA30	SBC I330	RS-232/422/485 (default 485) (1 port)	I/O board (Either one) Digital IO (4-IN, 4-OUT)	I/O board (Either one) CAN bus (2-channel)	Wireless module (Either one) WLAN 802.11 b/g (Z-COM XG623)	Wireless module (Either one) 3G (Huawei EM770W)	Storage 2.5"SSD (meet EN50155)	TR
Rugged PPC	7"	W07I93S-VMA4	○	X	○	○	I931	I931	X	X	X	X	○	X	○
	8.4"	R08IA3S-VMT1 800 x 600	○	○	○	○	○	○	X	X	X	○	X	X	○
		R08IA3S-VMM1 640 x 480	○	○	○	○	○	○	X	X	X	○	X	X	○
		R08IA3S-VMM2 1024 x 768	○	○	○	○	○	○	X	X	X	○	X	X	X
	10.4"	R10IA3S-VMM3 1024 x 768	○	○	○	○	IA31	I331	○	○	○	○	○	○	○
		R10IA3S-VMP1 800 x 600	○	○	○	○	○	○	○	○	○	○	○	○	○
	12.1"W	W12IA3S-VMM5 (Developing)	○	○	○	○	○	○	○	○	○	○	○	○	○
	15"	R15IA3S-VMM5HB 1024 x 768	○	○	○	○	○	○	○	○	○	○	○	○	○
		R15IA3S-VMA2 (LED back light) 1024 x 768	○	○	○	○	○	○	○	○	○	○	○	○	○

Mounting

- -5 to 90 degrees for Vehicle Mounting
- Standard 200x100 VESA Hole on Bracket
- Standard 75x75mm Panel Mounting on Rear Housing

Drawing with Mounting Bracket :



Measurements shown in mm
All Dimensions are ± 0.5 mm

Locking Handle for Bracket



- Easy & stable way to adjust



Comparison table

Item	Rugged Series	Regular Panel PC / Ind. Display
Mechanical	Robust Aluminum Alloy WIN	Normal iron
IP proof	Fully IP65 (except I/O parts) WIN	Front bezel IP65
Anti-corrosion	Powder coating treatment WIN	None
Shock & Vibration	Compliance with MIL-810F and EN50155 WIN	Normal Industrial Standard
Operating temp.	-25 to 60 deg.C for extension WIN	0 to 50 deg.C Normally
Power Input	9 to 36V Wide Range Isolation DC-in Power / lock jack WIN	12V or 19V input w/o lockable jack
User Control	In front w/ hot key for brightness WIN	Back I/O

Reliability and Certification

- CE, FCC Class B
- MIL-STD-810F Environmental and Shock and Vibration
- Compliance with EN50155 Standard

EN50155:2001 Railway Applications---Electronic Equipment Used on rolling Stock

Environmental Specifications
Vibration Test
Shock Test
EMC & Safety (Conforming to EN 50155)

THINK ROBUST, THINK G-WIN

Thanks and Q&A

