

G-WIN[®]

ruggedized

WINMATE

G-WIN
Rugged PPC / Display
Sales Kit

Sept. 2010

G-WIN[®]

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°C
- Compliance With MIL810F & EN50155 Standard



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



8.4" LCD

R08L100-VMM2
1024 x 768

10.4" LCD

R10L600-VMM3
1024 x 768

12.1"W LCD

W12L600-VMM5
1280 x 800

15" LCD

R15L100-VMA2
1024 x 768
(LED back light)

7" LCD

W07L100-VMA4
800 x 480

8.4" LCD

R08T200-VMT1
800 x 600

10.4" LCD

R10L100-VMP1
800 x 600

15" LCD

Full IP67

R15L100-67M5HB
1024 x 768

8.4" LCD

R08T200-VMM1
640 x 480

15" LCD

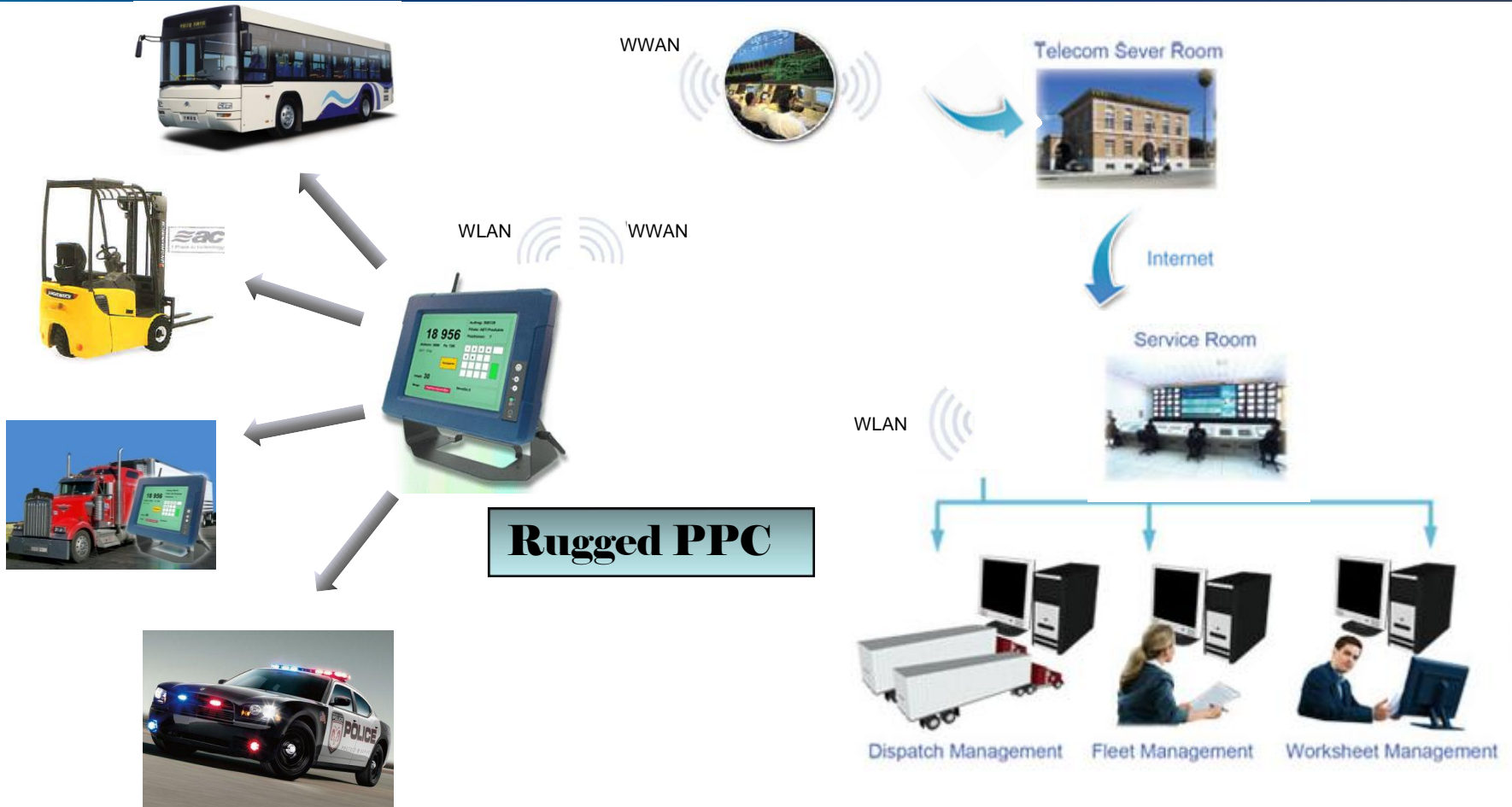
Military Grade

R15L100-MLM5HB
1024 x 768

G-WIN[®]

Design Concept

ruggedized



G-WIN[®] Application

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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

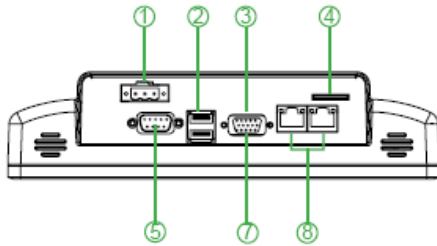
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- Energy saving and high performance platform design.
- Increase visibility with real-time information.
- Offers vehicle positioning services via wireless network.
- Reduce delivery cycle time and overall operating cost.

7" Rugged PPC

Model: W07I93S-VMA4

I931



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

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

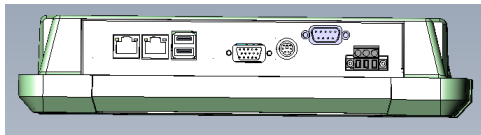
8.4" Rugged PPC



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 XP
Windows XP
Windows 7
CE
Linux

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

12.1" W Rugged PPC



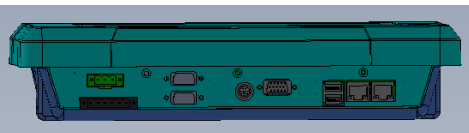
Model: **W12IXXS-VMM5**

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 XP
Windows XP
Windows 7
CE
Linux



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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



15" Military Grade PPC



G-WIN

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



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

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 XP
Windows XP
Windows 7
CE
Linux

15" IP67 Grade PPC



G-WIN

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

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

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

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



LAN 2xUSB RS232 PWR

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

7" Rugged Display

7"



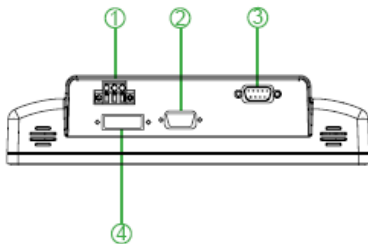
Model: **W07L100-VMA4**

Display Features:

- 7.4" TFT LCD
- 800 x 480 resolution
- 370 cd/m Brightness

7" I/O Ports:

- 1 x RS-232 (for Touch)
- 1 x DC-input (terminal block)
- 1 x VGA
- 1 x DVI



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

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8.4" Rugged Display



Model: **R08T200-VMT1**

Display Features:

- 8.4" TFT LCD
- 1024 x 768 resolution
- 300 cd/m Brightness

Model: **R08T200-VMM1**

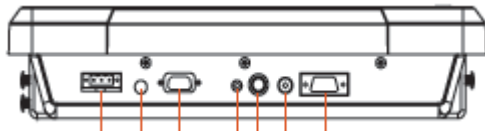
Display Features:

- 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



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

Optional information:

- Touch screen/Glass Transflective

10.4" & 12.1"W Rugged Display



10.4"

Model: R10L100-VMM3

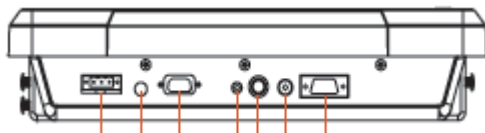
Display Features:

- ✦ 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

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15" Rugged Display



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Model: R15L100-VMA2

Display Features:

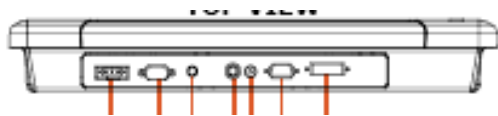
- ✦ 15" TFT LCD
- ✦ 1024 x 768 resolution
- ✦ 350 cd/m Brightness
- ✦ LED back light

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



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15" Military Grade Display

Model: R15L100-MLM5HB



Display Features:

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

Optional information:

- ✦ Touch screen/Glass Transflective

I/O Ports:

- ✦ 1 x RS-232 (for Touch)
- ✦ 1 x Power Jack
- ✦ 1 x VGA

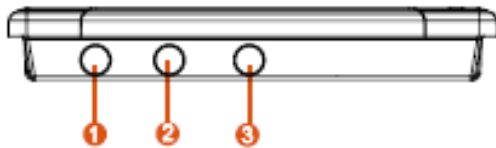


Test item	R15IA3S-MLM5
MIL-STD-810F *Vibration	✓
MIL-STD-810F *Shock	✓
MIL-STD-810F Humidity	✓
MIL-STD-810F Drop(Package)	✓
MIL-STD-810F High temperature	✓
MIL-STD-810F Low temperature	✓

15" IP67 Grade Display



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BOTTOM VIEW

- 1.power
- 2.VGA
- 3.RS232 or USB

Model: R15L100-67M5HB

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
- ✦ Optical Bonding

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



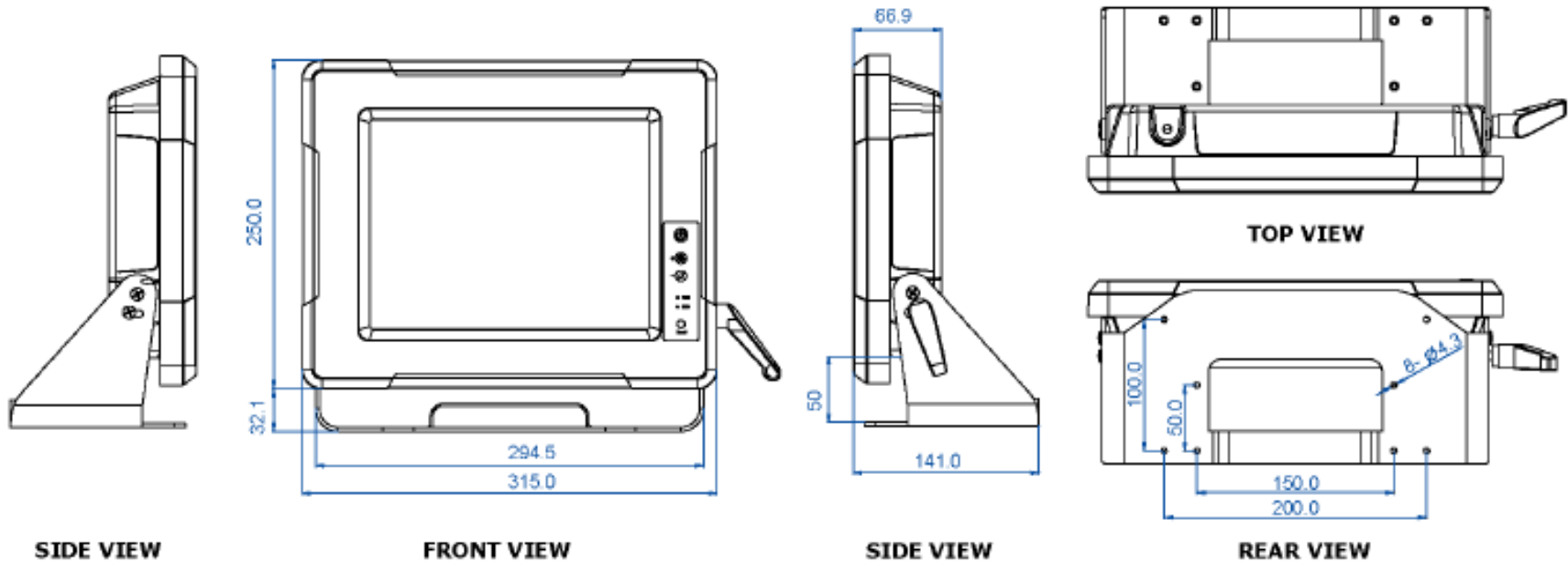
PPC Optional Information

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Product	Panel size	Model Name	Default				Optional								
			Isolation Power (9~36V)	Storage	RS-232 (1 port)	Operating Temp. (°C) (-25~60)	SBC		RS-232/422/485 (default 485) (1 port)	I/O board (Either one)		Wireless module (Either one)		Storage	TR
				4G CF			IA30	I330		Digital IO (4-IN, 4-OUT)	CAN bus (2-channel)	WLAN 802.11 b/g (Z-COM XG623)	3G (Huawei EM770W)	2.5"SSD (meet EN50155)	
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	○	○	○	○	○	○	○	○	○	○	○	○	○

- ➔ -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

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Locking Handle for Bracket



■ Easy & stable way to adjust



Comparison table

Item	Rugged Series	Regular Panel PC / Ind. Display
Mechanical	Robust Aluminum Alloy 	Normal iron
IP proof	Fully IP65 (except I/O parts) 	Front bezel IP65
Anti-corrosion	Powder coating treatment 	None
Shock & Vibration	Compliance with MIL-8105 and EN50155 	Normal Industrial Standard
Operating temp.	-25 to 60 deg.C for extension 	0 to 50 deg.C Normally
Power Input	9 to 36V Wide Range Isolation DC-in Power / lock jack 	12V or 19V input w/o lockable jack
User Control	In front w/ hot key for brightness 	Back I/O



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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)

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THINK ROBUST, THINK G-WIN

Thanks and Q&A

