Display Workstation Solutions

IEI industrial workstations are PCs with built-in touch screens. The workstations use either a microATX motherboard or a backplane with a CPU card.

Features

- Excellent expansion capability for full/half-size CPU cards
- Compact die-cast aluminum front panel and integrated LCD back frame
- Front panel, membrane keys, mouse pad and drive-bay enclosure meet IP 64 / IP 65 standard for tough environment

>> Industrial Workstation Series

Backplane

Full-size/Half-size SBC

>> Rack Mount Workstation Series

Product Line		WS-series	RPC-series
		IP 64 Waterproof Workstation with Membrane Keypads	Easy Rack Mount Workstation with OSD Functions
LCD Size		Model / Mechanism	
6.5"	640 x 480		EC-1040G (4U 14-slot full-size)
8.4"	800 x 600		RPC-6010G (4U 14-slot full-size)
10.4"	800 x 600	WS-612GS (6U 7-slot)	
12.1"	1024 x 768	WS-843GS (7U 10-slot)	RPC-6022G (5U 14-slot)
15"	1024 x 768	WS-855GS (8U 10-slot/m-ATX MB)	
17"	1280 x 1024	WS-875GS (9U 10-slot/m-ATX MB)	

Industrial Workstation Series

10.4" ~ 17" IP 64 Waterproof Workstation: Robust, Shock Resistance

Features

1. Die-cast aluminum front panel with integrated LCD screen
2. New robust chassis and retention kit structure for shock and vibration
3. Front panel, membrane keys, mouse pad and drive-bay enclosure meet IP 64 standard for tough environment
4. Full function membrane keys and submerged OSD controller
5. Advanced thermal and air-flow design
6. Analog VGA interface supports all CPU boards

Features

## IP 64 waterproof front panel, membrane keys, mouse pad & drive-bay

The industrial workstation's front cover is IP 64 compliant. The front cover is completely protected against the entry of dust and water sprayed from any direction.

Waterproof key lock and drive bay cover

Compact die-cast aluminum front panel and integrated LCD back frame

Rack or wall mount systems always apply the whole system weight on the front bezel and LCD container. One piece design has higher strength and lighter weight because of aluminum die casting.
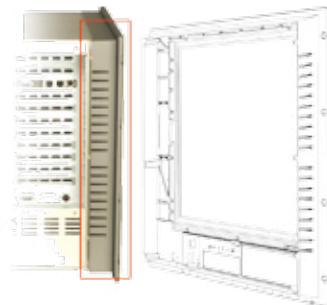
New robust chassis and retention kit structure to against shock and vibration

The whole chassis and retention kit are designed to be sturdy and rugged. The whole chassis has less joints and connections to increase resistance to shock and vibration.
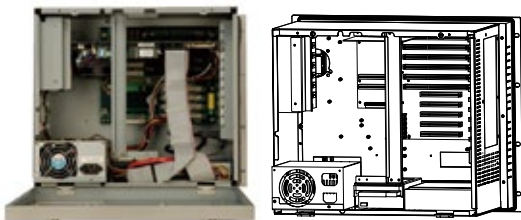
Enhanced thermal management

Built-in fans and hard drive cooling ensure that temperatures stay within operating range all the time. This extends product life and increases system reliability.
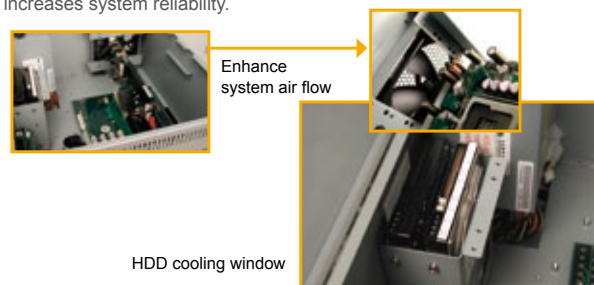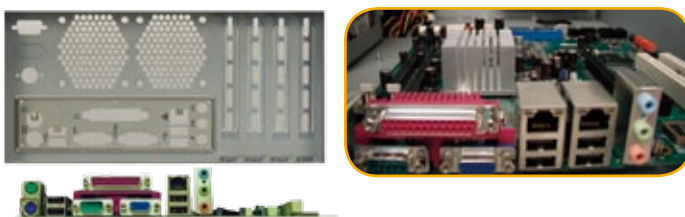
Enhance system air flow

HDD cooling window

CPU card and Micro-ATX support

The WS-855GS, WS-875GS and WS-895GS can support microATX motherboards. microATX motherboards are widely used and offer a larger range of options to suit the needs of the system.

Optional RS-232 interface touch screen

The WS series provides an RS-232 port reserved for touch screen. IEI Workstation provides T-R model with high strength fiber glass touchscreen applications.
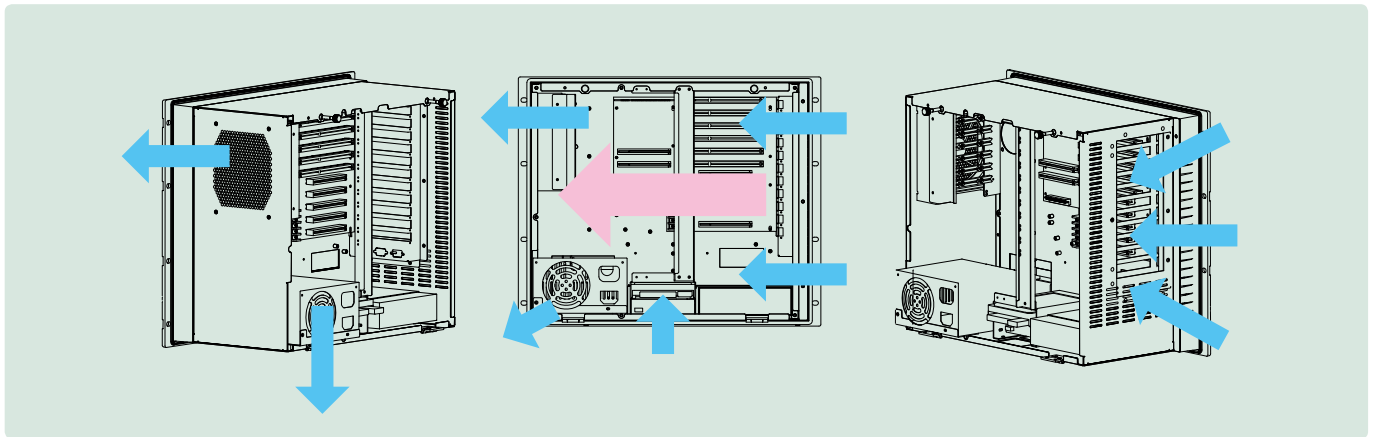
Optional RS-232 port

Complete drive support

The industrial workstations support 3.5" and 5.25" drives, and a floppy drive.
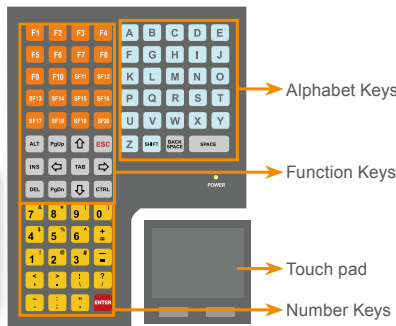
Advanced thermal and air-flow design

The thermal issue is an important issue for the modern industrial PC. The IEI industrial workstation is designed to have air flows through the computer by pulling cool air in one side and exhaust heated air out the other.

Full function membrane keys & submerged OSD controller

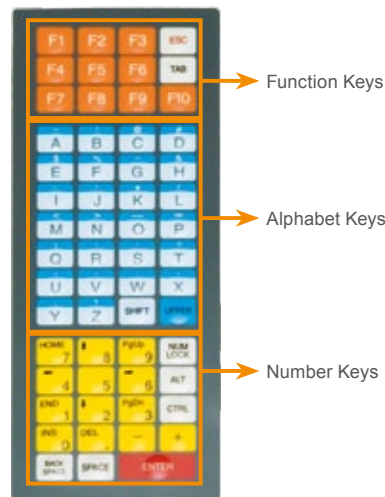• **WS-612GS**
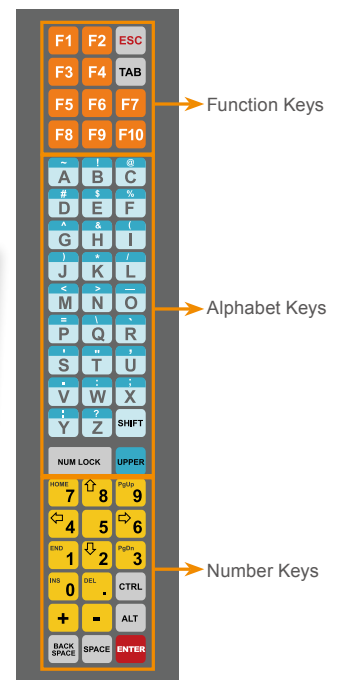

Alphabet Keys

Function Keys

Touch pad

Number Keys

• **WS-843GS**

Function Keys

Alphabet Keys

Number Keys

• **WS-855GS**

Function Keys

Alphabet Keys

Number Keys

• **WS-875GS**

Function Keys

Alphabet Keys
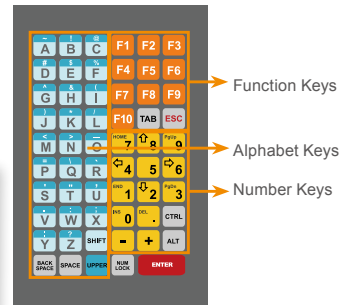
Number Keys

Industrial Workstation Selection Guide

Model	WS-612GS	WS-843GS	WS-855GS	WS-875GS
LCD Size	10.4"	12.1"	15"	17"
Resolution	800 x 600	1024 x 768	1024 x 768	1280 x 1024
Brightness (cd/m²)	400	500	350	300
Contrast	700:1	700:1	400:1	500:1
LCD color	262K	262K	262K	16.2M
Backlight Hours	50000 (LED Backlight)	50000 (LED Backlight)	50000	50000
Input Interface	Analog VGA (DB-15)			
Slot	7 slots	10 slots	10 slots / MB	10 slots / MB
Form Factor	Full/Half-size SBC		Full/Half-size SBC / microATX motherboard	
Mounting	19" rack mount			
Rack Height	6U	7U	8U	9U
Front Frame	Aluminum			
IP Level	IP 64			
KeyPad	63 Keys	59 Keys	59 Keys	59 Keys
Function Key	20 Keys	10 Keys	10 Keys	10 Keys
Touch Pad	Yes			
Front Panel USB	4	2	2	2
HDD Drive Bay	1 x 3.5" HDD	1 x 3.5" HDD	1 x 3.5" HDD	1 x 3.5" HDD
CD-ROM Drive Bay	N/A	1 x 5.25" CD-ROM	1 x 5.25" CD-ROM	1 x 5.25" CD-ROM
FDD Bay	1 x 3.5" FDD	1 x 3.5" FDD	1 x 3.5" FDD	1 x 3.5" FDD
System Fan	12cm ball bearing 99.6 CFM fan			
Touch Screen	5-wire resistive touch screen			
Vibration	5 ~ 17 Hz, 0.1" double amplitude displacement / 17~640 Hz, 1.5G acceleration peak to peak			
Shock	10G acceleration peak to peak (11ms)			
Relative Humidity	5% ~ 95%, non-condensing			
Operating Temperature	0°C ~ 50°C			
Color	Silver (Pantone PMS-8001)			
Dimensions (W x H x D) (mm)	483 x 266 x 248	483 x 310 x 268	483 x 353 x 261	483 x 398 x 268
Weight (NW / GW)	9.2 kg / 14.4 kg	10.7 kg / 17.2 kg	12 kg / 18.2 kg	14.2 kg / 20.6 kg
Recommended Backplane	AT: IP-7S, BP-7S ATX: HPE-7S1, PE-6S/7S, PE-7S2 AT/ATX: PCI-7S	AT: BP-10S ATX: PCI-10S2, HPE-7S1/8S, PE-6S/7S/7S2/8S/9S AT/ATX: PCI-10S, IP-10S, IPX-9S		
Recommended microATX MB	N/A		IMB-9454, IMB-G41A	

Power Supply	AT: ACE-916AP-RS
	ATX: ACE-A618A-RS-R11,
	    ACE-4520C-RS,
	    ACE-A225A-R10,
	    ACE-615A-RS-R11
		AT: ACE-925A(AP-U)-RS, ACE-932A-RS, ACE-935AL-RS, ACE-T140A-RS
		ATX: ACE-4860AP-R11-RS, ACE-828A(A/M/V)-RS, ACE-A130B-R10, ACE-A140A-R10,
		    ACE-A140A-S-R10, ACE-A160A-R10		

Dimensions *(Unit: mm)*

WS-612GS

WS-843GS

WS-875GS

WS-855GS
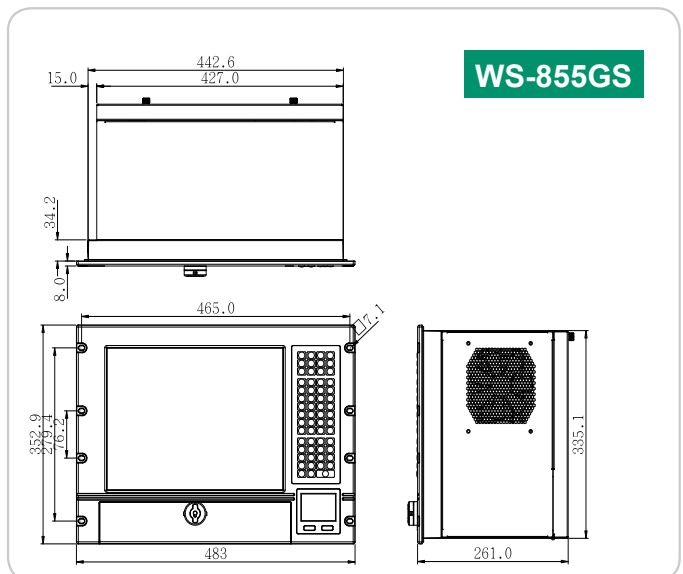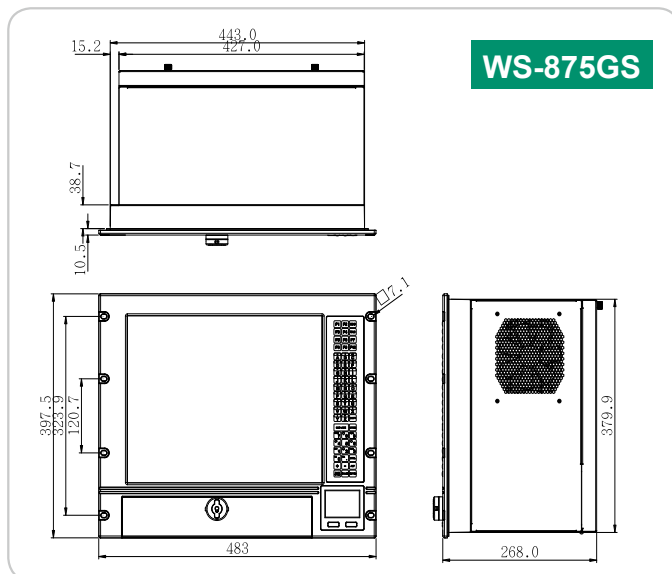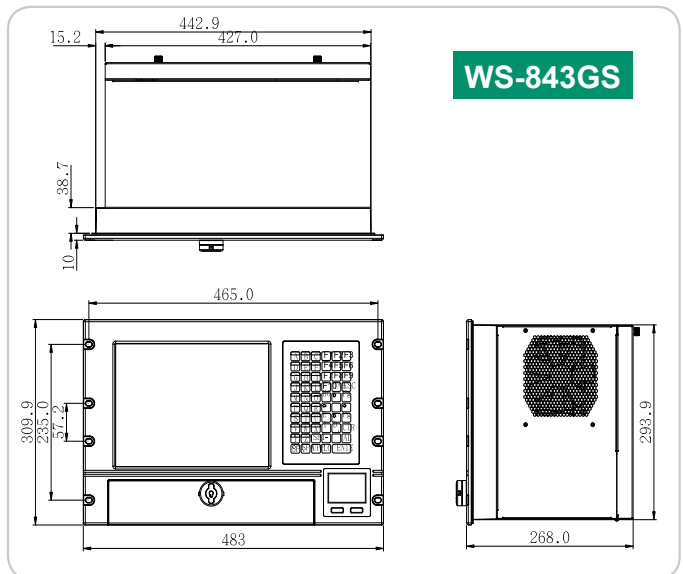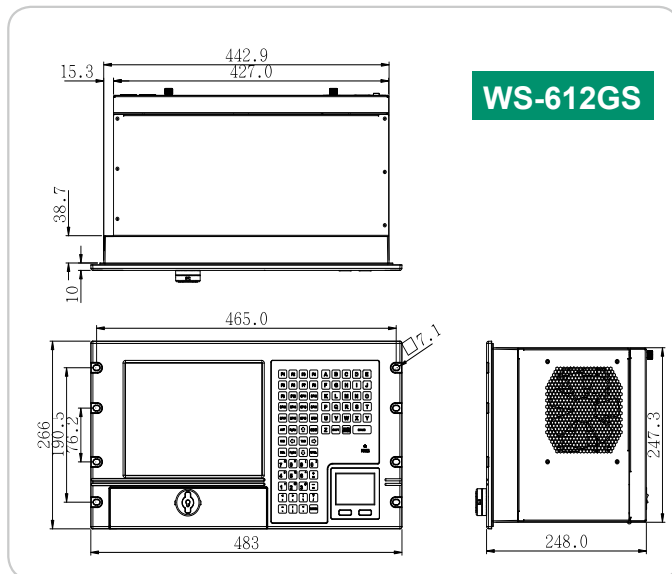
Ordering Information

Part NO	Description
WS-612GS / A225A / R-R20	6U 10.4" 400cd/m² SVGA LCD 8-slot industrial workstation, aluminum front, silver color, W/ACE-A225A, W/10.4" touch screen, RoHS
WS-843GS / A130B / R-R20	7U 12.1" 500cd/m² XGA LCD 10-slot industrial workstation, aluminum front, silver color, W/ACE-A130A/12.1" touch screen, RoHS
WS-855GS / A130B / R-R20	8U 15" 350cd/m² XGA LCD 10-slot industrial workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen,RoHS
WS-855GSATX / A130B / R-R20	8U m-ATX 15" 350cd/m² XGA LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 15" resistive touch screen, M-ATX version
WS-875GS / A130B / R-R20	9U 17" 300cd/m² SXGA TFT LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 17" resistive touch screen
WS-875GSATX / A130B / R-R20	9U 17" 300cd/m² SXGA LCD workstation with ACE-A130B-R10 300W ATX with PFC power supply and 17" resistive touch screen, M-ATX version

Packing List

Part Number	Description	Amount	Remark
32000-000002-RS	AC Power Cable	1	Standard Packing, for Europe, 32000-000004-RS for South Africa 32000-000022-RS for Australia, 32000-000025-RS for America 32000-000026-RS for Switzerland
32000-101200-RS	VGA Cable	1	A)D-SUB 15P MALE 90°(B)D-SUB 15PIN MALE
32100-034801-RS	PS_ON Cable for ATX signal	1	
41015-0003C0-00-RS	Press Stick Kit (Long)	4	
41015-0004C0-00-RS	Press Stick Kit (Short)	3	
47001-000101-RS	Press Stick Rubber	7	
	User Manual	1	
32000-075000-RS	KeyPad / MousePad PS/2 Cable	1	For SBC Models
32000-078400-RS	KeyPad / MousePad PS/2 Cable	1	For m-ATX (Motherboards) Models
32000-101100-RS	RS-232 Cable / Touch Pen / Driver CD-ROM for Touch Screen	1	(A)D-SUB 9P MALE 90°(B)D-SUB 9PIN FEMALE

EC-1040G

4U 14-slot Rack Mount LCD Workstation

Features

1. 6.5" TFT LCD with OSD control panel
2. Multi-function thermal alarm system
3. Optional KM-088G (keyboard and touch pad module)
4. Flexible driver combination
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe X1	PCIe X4	PCIe X16	PSU Connector
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

PICMG 1.3 Support

Type	Model No.	Watt
AT	ACE-935AL-RS	300W
	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
	ACE-A140A-R10	400W
	ACE-A140A-S-R10	400W
Redundant Power Support	ACE-R4130AP-RS	300W

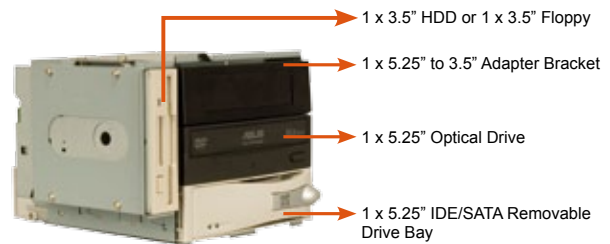## Specifications

Construction	Heavy Duty Metal	Color	Black
SBC Form Factor	EC-1040GB – Full size slot CPU card EC-1040GBATX – ATX or Micro ATX	Weight (Net / Gross)	15.3 kg / 28.8 kg
Drive Bays	3 x 5.25" + 1 x 3.5"	Dimensions	480 mm x 431 mm x 176 mm
Cooling Fans	2 x 8 cm	Touch Screen	Optional 4-wire resistive type with RS-232 interface
I/O Openings	2 x COM, 1x PS/2	**LCD Spec**	
Expansion Slots	14 slots for EC-1040G 7 slots for EC-1040GATX	Size	6.5"
Indicators	1. Temperature 2. LAN 3. Fan	Resolution	640 x 480 (VGA)
Buttons	1. Power switch 2. System reset	Brightness	800 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	Contrast	600:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	Viewing Angle	160º / 140º
Operating Temperature	0°C ~ 50°C	Backlight MTBF	50000 (LED Backlight) hrs
Operating Humidity	5% ~ 95% @ 60° C, non-condensing	LCD Color	262k

EC-1040G
Dimensions (Unit: mm)

■ Flexible drive combination

IEI EC-1040G provides a versatile drive combination for all kinds of uses. User can easily integrate different media drive size for their needs.

- 1 x 3.5" HDD or 1 x 3.5" Floppy
- 1 x 5.25" to 3.5" Adapter Bracket
- 1 x 5.25" Optical Drive
- 1 x 5.25" IDE/SATA Removable Drive Bay

■ Rear view of EC-1040G

EC-1040GBX

- **Works with backplane**
- **14 expansion slots**

EC-1040GBATX

- **Works with ATX motherboard**
- **7 expansion slots**

■ Optional KM-088G

The KM-088G is an 88-key touch pad module. The standard version is with English keyboard and optional Japanese, German, French, Italian, Chinese, or Russian version keyboard is available. It also supports media drive for their needs.

■ Advanced air-flow design

Thermal condition is the most important issue of the new generation IPCs. IEI's "single way" design provides you higher system performance capability and more flexibility for the environment.

2 x 8 cm Fans

88 Keys with 7 Languages

Touch Pad

Ordering Information

Part No.	Description
EC-1040GB / A130B-R30	4U Rack mount LCD chassis with 6.5" 800 cd/m² VGA TFT LCD, ACE-A130B-R10, RoHS
EC-1040GB / A130B / R-R30	4U Rack mount LCD chassis with 6.5" 800 cd/m2 VGA TFT LCD,ACE-A130B-R10 and touch screen,RoHS
EC-1040GBATX / A130B-R30	4U Rack mount LCD chassis for ATX MB with 6.5" 800 cd/m² VGA TFT LCD,ACE-A130B-R10,RoHS
EC-1040GBATX / A130B / R-R30	4U Rack mount LCD chassis for ATX MB with 6.5" 800 cd/m² VGA TFT LCD,ACE-A130B-R10 and touch screen,RoHS
Optional	
KM-088G-[L]-R20	[L] : Language code EN: English, JP: Japanese, DE, German, FR: French, IT: Italian, RU: Russian, CH: Chinese

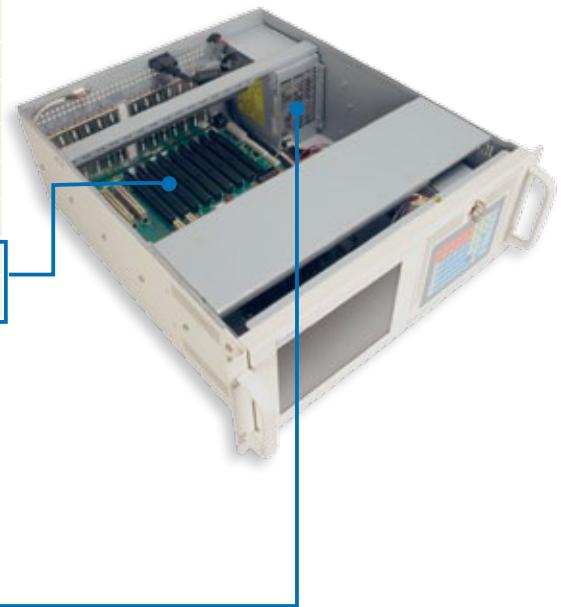# RPC-6010G

8.4" TFT LCD 4U 14-slot Rack Mount Workstation

Features

1. 8.4" TFT LCD with OSD and membrane keypads
2. Flexible drive combination
3. Lockable front door
4. Two USB ports on the front panel
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe			PSU Connector
				X1	X4	X16	
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

PICMG 1.3 Support

Power Supply Options		
Type	Model No.	Watt
AT	ACE-935AL-RS	300W
	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
	ACE-A140A-R10	400W
	ACE-A140A-S-R10	400W
ATX Redundant	ACE-R4130AP-RS	300W

Specifications

Construction	Heavy Duty Metal	Color	White
SBC Form Factor	RPC-6010G – Full-size slot CPU card RPC-6010GBATX – ATX or microATX	Weight (Net / Gross)	15 kg / 18 kg
Drive Bays	3 x 5.25" + 1 x front-accessible 3.5" + 1 x HDD	Dimensions	528 mm x 431 mm x 176 mm
Cooling Fans	1 x 12 cm	Touch Screen	4-wire resistive type
I/O Openings	2 x USB, 2 x COM, 1 x PS/2	**LCD Spec.**	
Expansion Slots	14 slots for RPC-6022G 7 slots for RPC-6022GATX	Size	8.4"
Indicators	Power LED	Resolution	800 x 600 (SVGA)
Buttons	Power switch System reset	Brightness	450 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	Contrast	600:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	Viewing Angle	160º / 140º
Operating Temperature	0°C ~ 50°C	Backlight MTBF	50000 (LED Backlight) hrs
Operating Humidity	5% ~ 95% @ 60°C, non-condensing	LCD Color	262k

RPC-6010G
Dimensions (Unit: mm)
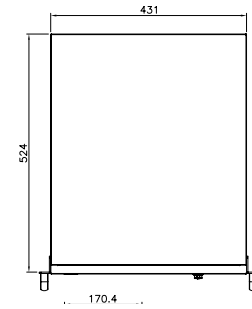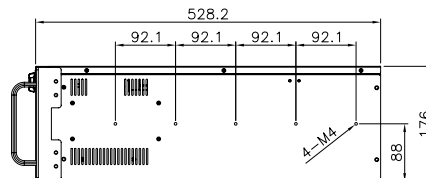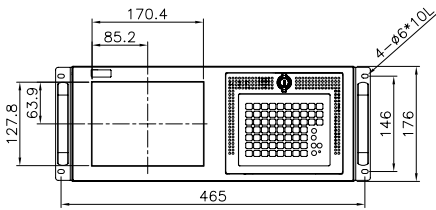
■ Rear view of RPC-6010G
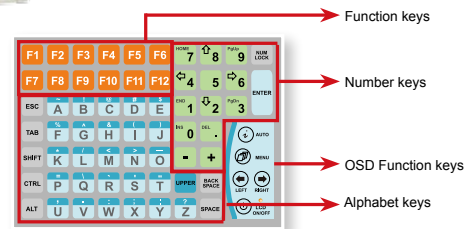

RPC-6010G

Works with backplane
14 expansion slots

RPC-6010GATX

Works with ATX motherboard
7 expansion slots

■ Waterproof OSD and membrane keypads
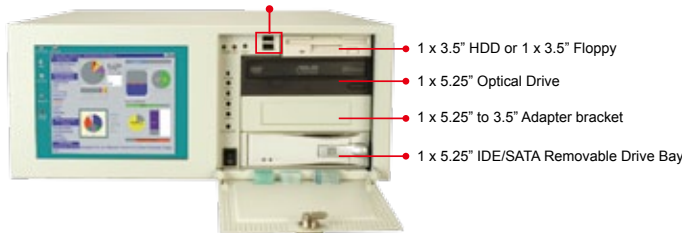
IEI RPC series has a complete set of waterproof OSD and membrane keypads on the front panel, which simplify system configuration.
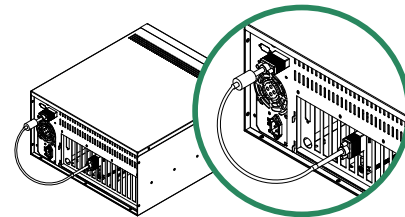

Function keys
Number keys
OSD Function keys
Alphabet keys

■ Flexible driver combination

IEI RPC series provides versatile drive combination for all kinds of uses. Users can easily integrate any media drive size for their needs.

Peripheral devices with USB interface are popular and widely used nowadays. For the convenience of connection, RPC series has two USB ports on the front bezel offering excellent accessibility.
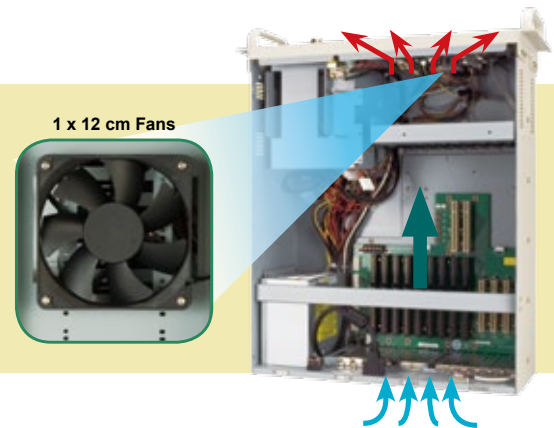

1 x 3.5" HDD or 1 x 3.5" Floppy
1 x 5.25" Optical Drive
1 x 5.25" to 3.5" Adapter bracket
1 x 5.25" IDE/SATA Removable Drive Bay

■ Analog VGA interface supports all CPU boards

■ Advanced air-flow design

Thermal condition is the most important issue of the new generation IPCs. IEI's "single way" design provides high system performance in any environment.

1 x 12 cm Fans

Ordering Information

ACE-A131B (ATX)	
RPC-6010GW/A130B/R-R20	4U Rack mount chassis, with with 8.4" 450cd/m² SVGA LCD w/ACE-A130B-R10 and Touch Screen, RoHS
RPC-6010GWATX/A130B/R-R20	4U Rack mount chassis for ATX motherboard, with 8.4" 450cd/m² SVGA LCD w/ACE-A130B-R10, w/8.4" Touch Screen, RoHS
ACE-R4130AP (Redundant)	
RPC-6010GWR/R4130AP/R-R20	4U Rack mount chassis, with 8.4" 450cd/m² SVGA LCD ,ACE-R4130AP-R10 and Touch Screen, RoHS
RPC-6010GWAR/R4130AP/R-R20	4U Rack mount chassis for ATX mother board, with with 8.4" 450cd/m² SVGA LCD, ACE-R4130AP-R10 and Touch Screen, RoHS

RPC-6022G

12.1" TFT LCD 5U 14-slot Rack Mount Workstation

Features

1. 12.1" TFT LCD with OSD and membrane keypads
2. Flexible drive combination
3. Lockable front door
4. Two USB ports on the front panel
5. PICMG 1.3 backplane and redundant power supply support
6. Advanced air-flow design

Backplane & Power Supply Options

Backplane Model No.	SBC Type	PCI	ISA	PCIe			PSU Connector
				X1	**X4**	**X16**	
PCI-13SD-RS-R40	PICMG 1.0	3+4	3+3	0	0	0	AT/ATX
PCI-14S2-RS-R40	PICMG 1.0	4	8	0	0	0	AT/ATX
PCI-14S3-RS-R40	PICMG 1.0	4	9	0	0	0	AT/ATX
PX-14S3-RS-R41	PICMG 1.0	12	2	0	0	0	AT/ATX
PC-14S5-RS-R41	PICMG 1.0	7	6	0	0	0	AT/ATX
BP-14S-RS-R40	ISA	0	14	0	0	0	AT
PXAGP-13S3-RS-R30	PIAGP	11	0	0	0	0	AT/ATX
PE-13SD-R40	PICMG 1.3	2/2	0	0/4	1/0	1/1	ATX
PXE-13S-R42	PICMG 1.3	8	0	3	0	1	ATX

Power Supply Options		
Type	**Model No.**	**Watt**
AT	ACE-935AL-RS	300W
	ACE-T140A-RS	400W
ATX	ACE-A130B-R10	300W
	ACE-A140A-R10	400W
	ACE-A140A-S-R10	400W
ATX Redundant	ACE-R4130AP-RS	300W

PICMG 1.3 Support

Specifications

Construction	Heavy Duty Metal	**Color**	White
SBC Form Factor	RPC-6022G – Full-size slot CPU card RPC-6022GBATX – ATX or microATX	**Weight (Net / Gross)**	15 kg / 18 kg
Drive Bays	1 x 5.25" + 1 x front-accessible 3.5" + 1 x HDD	**Dimensions**	470 mm x 431 mm x 220 mm
Cooling Fans	2 x 12 cm	**Touch Screen**	5-wire resistive type
I/O Openings	2 x USB, 2 x COM, 1 x PS/2	**LCD Spec.**	
Expansion Slots	14 slots for RPC-6022G 7 slots for RPC-6022GATX	**Size**	12.1"
Indicators	Power LED	**Resolution**	1024 x 768 (XGA)
Buttons	Power switch system reset	**Brightness**	500 cd/m²
Operating Shock	10G acceleration peak to peak (11ms)	**Contrast**	700:1
Operating Vibration	5~17Hz 0.1" double amplitude displacement 17~640 Hz 1.5G acceleration peak to peak	**Viewing Angle**	160º / 160º
Operating Temperature	0°C~ 50°C	**Backlight MTBF**	50000 (LED Backlight) hrs
Operating Humidity	5% ~ 95% @ 60° C, non-condensing	**LCD Color**	262k

RPC-6022G
Dimensions (Unit: mm)

246
123
185
92.5
4-Ø6*10L
146.1
221
465

471.2
92.1 92.1 92.1 92.1
221
4-M4
88

431.2
468.2
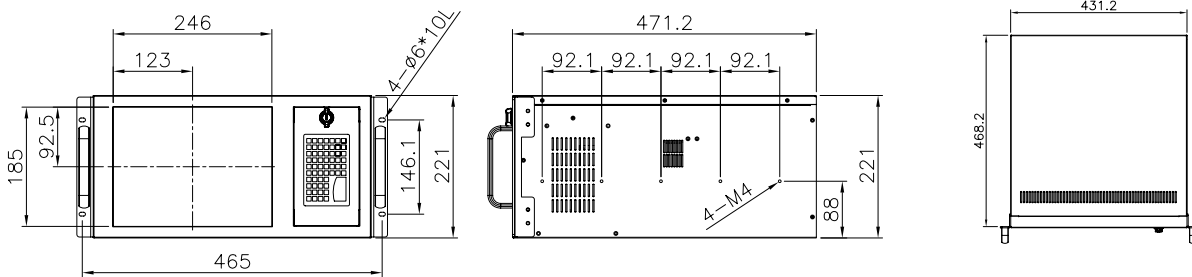
■ RPC-6022G Rear view

RPC-6022G
Works with backplane 14 expansion slots

RPC-6022GATX
Works with ATX motherboard 7 expansion slots

■ Waterproof OSD and membrane keypads

IEI RPC series has a complete set of waterproof OSD and membrane keypads on the front panel, which simplify system configuration.
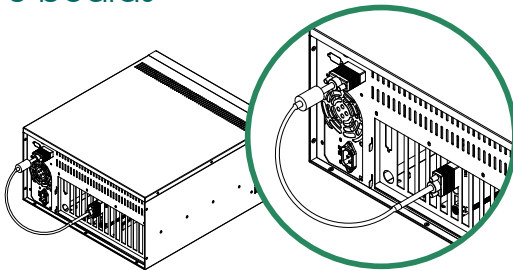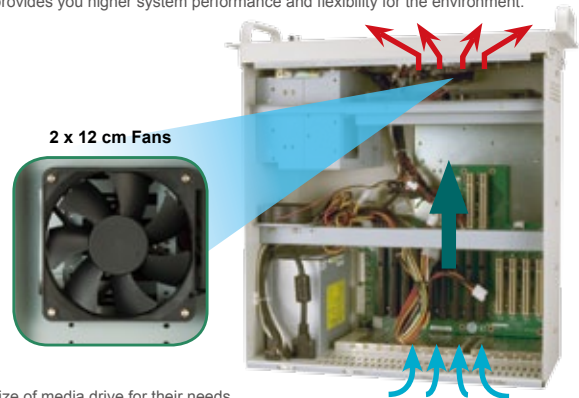
Function keys
Alphabet keys
Number keys
OSD Function keys

■ Analog VGA interface supports all CPU boards

■ Advanced air-flow design

Thermal condition is the most important issue of new generation IPCs. IEI's "Single way" design provides you higher system performance and flexibility for the environment.

2 x 12 cm Fans

■ Flexible drive combination

IEI RPC series provides versatile drive combination for all kinds of usage. Users can easily integrate any size of media drive for their needs.
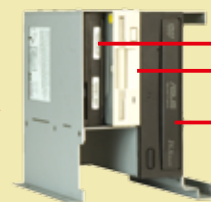
1 x 5.25" IDE/SATA
Removable Drive Bay

or

1 x 5.25" to 3.5"
Adapter bracket

or

1 x 3.5" HDD
1 x 3.5" HDD or
1 x 3.5" Floppy
1 x 5.25" Optical Drive

Ordering Information

ACE-A131B (ATX)	
RPC-6022GXW/A130B/R-R10	5U Rack mount chassis, with 12.1" 500cd/m² XGA LCD w/ACEA130B-R10,RoHS and Touch Screen, RoHS
RPC-6022GXWA/A130B/R-R10	5U Rack mount chassis for ATX mother board, with 12.1" 500cd/m² XGA LCD w/ACE-A130B--R10, w/12.1" Touch Screen, RoHS
ACE-R4130AP (Redundant)	
RPC-6022GXWR/R4130AP/R-R10	5U Rack mount chassis, with 12.1" 500cd/m² XGA LCD ,ACE-R4130AP Redundant Power Supply and Touch Screen, RoHS
RPC-6022GXWAR/R4130AP/R-R10	5U Rack mount chassis for ATX mother board, with 12.1" 500cd/m² XGA LCD, ACE-R4130AP-RS and Touch Screen, RoHS