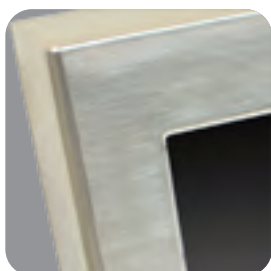# KINGDY

WP Series: Full IP65 Touch Panel PC

360° protection against intrusion of dust, water, oil, or corrosive materials
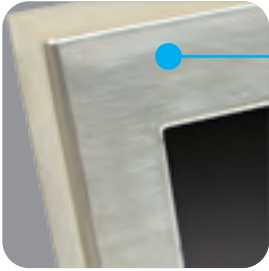
Features

- IP65 compliant 6-sided stainless steel chassis
- IP65 waterproof stainless steel connectors
- Standard / IP65 rated external power adapter

Specially suitable for dusty / humid / oily / corrosive industrial environments
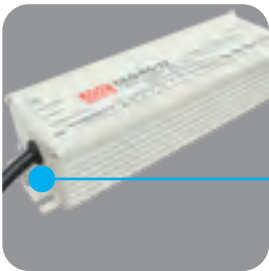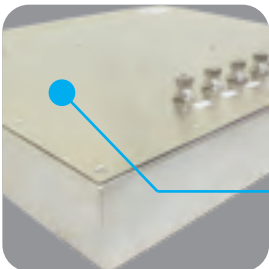
IP65 compliant 6-sided sealed stainless steel chassis
to prevent liquid / dust from getting into the housing and
to resist acid- / alkali-based cleaning agents from corroding the device

IP65 waterproof stainless steel connectors
to prevent liquid from getting into the housing via the cable entry points

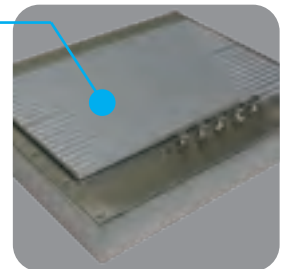**IP65 rated external power adapter (alternative)**
to prevent liquid from getting into the interior of the adapter
from the junction of the shell

External heat sink (on the rear for WP-AN Series with Core i5 Turbo up to 2.7GHz CPU & WP-GN Series only)
to faster dissipate the heat to keep
excellent CPU performance

No external heat sink (for WP-AN Series with Core i5 1.8GHz / Celeron CPU & WP-2L / -7L / -8L / -9L / -BL / -EN / -FN Series)

I/O connectors are loacted on the rear for 17" ~ 21.5" devices

I/O connectors are loacted on the bottom for 10.4" ~ 15" device

RFID sensor (optional)
to enable RFID technology application, such as logistics,
warehousing, distribution or industrial automation
(identification of workpiece carriers on assembly lines, material
flow control, identification of containers and other receptacles)

WP Series Full IP65 Touch Panel PC

Challenges

For a PC-based automation system installed in some industrial environments such as food processing factories, car washing stations, petroleum plants or pharmeaceutical facilities, moisture, grease and dust resistance is an important criterion to ensure high reliability against harsh conditions. IP65 rating is the most commonly used index when an industrialist purchases waterproof industrial PCs.

🚫 **Waterproof**

🚫 **Dustproof**

🚫 **Anti-oil**

🚫 **Corrosion-proof**

Solutions

Kingdy's WP Series is the very full IP65 touch panel PC featuring the following protection designs.

● Dustproof / Waterproof full IP65 chassis, connector and power adaptor not only to prevent dust and water from invading the inner sensitive components but also to allow the device to be washed down

● Corrosion-proof and anti-oil stainless steel chassis not only to prevent corrosion generated by acid, alkali and salt but also to facilitate cleaning and maintenance

Applications

Foodstuff, Pharmaceuticals

Logistics, Warehousing Distribution

Military

Petroleum, Chemistry, Petrochemistry

Industrial automation

WP-EN Series (Intel J1900)

CPU Performance	★★★ (3 stars)
Energy Efficiency	(3 leaves)
Touch Function	
Dissipation Design	Fanless, No external heat sink
Waterproof Design	IP65 chassis, IP65 connectors, IP65 power adapter (alternative)
Housing Design	Stainless steel

CPU	Intel® Bay Trail D-J1900 2.0GHz Quad Core Processor (CPU OnBoard)
Memory	2 x 204-pin SODIMM Dual-channel DDR3L 1333 / 1066MHz up to 8 GB
Power Supply	Standard / full IP65 DC in 12V external power adaptor
I/O Ports (Default)	2 x RS232, 1 x GLAN, 1 x USB, 1 x SATA socket
I/O Ports (Optional)	Any combination of up to 3 x RS232, 3 x GLAN, 4 x USB but totally no more than 4
Expansion	1 x Mini PCIe slot (with mSATA function)
Operation Temperature	0°C ~ 45°C
Storage Temperature	-10°C ~ 70°C
Relative Humidity	10% ~ 90% non-condensing
OS	Win 7 Pro, Embedded 7, Win 8 Pro, Embedded 8
Installation	VESA mount 100 x 100 mm
Optional Items	RFID sensor, No touch screen, Memory, Storage devices, WiFi, OS

Model Name		WP-ENR12RF	WP-ENS12RF	WP-ENL15RF
Display	Size / Aspect Ratio	12.1" TFT (4:3)	12.1" TFT (4:3)	15" TFT (4:3)
	Backlight	CCFL	LED	LED
	Resolution	800 x 600	1024 x 768	1024 x 768
	Colors	16.2 M	16.2 M	16.2 M
	Luminance (cd/m²)	400	500	400
	Contrast Ratio	600:1	700:1	700:1
	Viewing Angle (H/V°)	160/120	160/160	160/160
	MTBF (hrs)	50,000	50,000	50,000
	Touch Screen	5-wire resistive	5-wire resistive	5-wire resistive
Dim. (W x H x D+heatsink, mm)		TBD	TBD	380 x 290 x 67+10
Weight (main unit + heatsink, kg)		8.5+1	8.5+1	10.5+1
I/O Port's Location		Bottom	Bottom	Bottom

Model Name		WP-ENR17RF	WP-ENL17RF	WP-ENL19RF	WP-END21RF
Display	Size / Aspect Ratio	17" TFT (4:3)	17" TFT (4:3)	19" TFT (4:3)	21.5" TFT (16:9)
	Backlight	CCFL	LED	LED	LED
	Resolution	1280 x 1024	1280 x 1024	1280 x 1024	1920 x 1080
	Colors	16.7 M	16.7 M	16.7 M	16.7 M
	Luminance (cd/m2)	300	350	250	300
	Contrast Ratio	800:1	1000:1	1000:1	5000:1
	Viewing Angle (H/V°)	140/125	140/170	170/160	178/178
	MTBF (hrs)	50,000	50,000	50,000	50,000
	Touch Screen	5-wire resistive	5-wire resistive	5-wire resistive	5-wire resistive
Dimension (W x H x D, mm)		425 x 361 x 68	425 x 361 x 68	455 x 367.6 x 67	TBD
Weight (kg)		15.5	15.5	15.5	17.5
I/O Port's Location		Rear	Rear	Rear	Rear