

UW Series: Sunlight Readable Full IP65 Multi Touch Panel PC

*360° protection against
intrusion of dust, water, oil, or
corrosive materials &
permanent readability in any lighting situation*



Features

- IP65 compliant 6-sided stainless steel chassis
- IP65 waterproof stainless steel connectors
- IP65 rated external power adapter (alternative)
- Up to 1600-nit high brightness LED-backlit LCD panel



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Challenges

In many cases, the system may be deployed in harsh environments at the risk of the intrusion of water, oil, dust or corrosive materials into the inside of the device. How to prevent it is an important consideration when purchasing an automation system. If unfortunately the system has to be installed under direct sunlight or any strong light source, the readability on the screen is another factor to create a friendly and efficient operation interface.



Waterproof



Dustproof



Anti-oil



Corrosion-proof



Sunlight Readable

Solutions

Kingdy's UW Series is the very sunlight readable full IP65 multi touch panel PC featuring the following protection designs and designed for sophisticated human-machine interaction in the most intuitive way.

- **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 or salt but also to facilitate cleaning and maintenance
- **Up to 1600-nit high brightness LED-backlit LCD panel** to emit more light than normal commercial grade to keep excellent readability on the screen under direct sunlight or any strong light source

Collections

Series Number	CPU	Performance		Structure		Panel Size									
		CPU	Power Efficiency	Fan	External Heat Sink	4:3						16:9			
						8.4"	10.4"	12.1"	15"	17"	19"	15.6"	17.3"	18.5"	21.5"
UW-2L	Intel D2550	★★	🍃🍃	Fanless	No				V	V	V				V
UW-7L	Intel N2800	★★	🍃🍃	Fanless	No				V	V	V				V
UW-8L	Intel N2600	★★	🍃🍃	Fanless	No				V	V	V				
UW-9L	AMD T40N	★★	🍃🍃	Fanless	No				V	V	V				V
UW-BL	AMD T56N	★★	🍃🍃	Fanless	No				V	V	V				V
UW-EN	Intel J1900	★★★	🍃🍃🍃	Fanless	No				V	V	V				V
UW-FN	Intel E3845	★★★	🍃🍃🍃	Fanless	No				V	V	V				V
UW-GN	Intel i7/i3/Celeron	★★★	🍃🍃🍃	Fanless	Yes				V	V	V				V
UW-NN	Intel Core i3-6100U	★★★	🍃🍃🍃	Fanless	Yes				V	V	V				V



Foodstuff, Pharmaceuticals



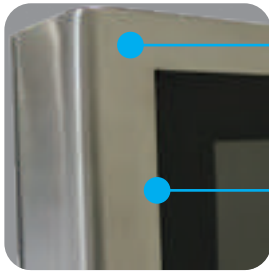
Military



Petroleum, Chemistry, Petrochemistry

Applications

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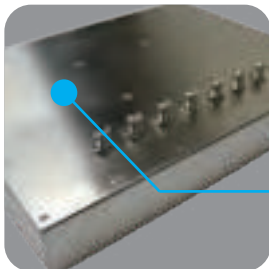
- IP65 compliant 6-sided sealed stainless steel chassis
*to prevent liquid / dust from getting into the housing and
to resist acid- / alkali-based cleaning agents from corroding the device*
- Seamless flat-bezel design between chassis and panel
to decrease water / dust accumulation and to facilitate cleaning / maintenance



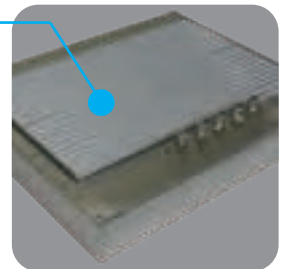
- IP65 waterproof stainless steel connectors
to prevent liquid from getting into the housing via the cable entry points



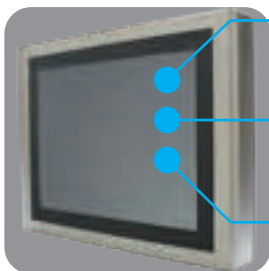
- IP65 rated external power adapter (alternative)
*to prevent liquid from getting into the interior of the adapter
from the junction of the shell*



- External heat sink (on the rear for UW-GN Series)
*to faster dissipate the heat to keep
excellent CPU performance*



- No external heat sink (for UW-2L / -7L / -8L / -9L /
-BL / -EN / -FN Series)



- 7H hardness anti-scratch panel surface
to avoid touch function failure due to scratch
- Oil- & water-stain-proof panel surface
to ensure touch sensitivity
- Enhanced PCT touch panel
to enable input with glove which is necessary in some applications



- 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)*

UW-NN Series (Intel Core i5-6300U)



CPU Performance



Energy Efficiency



Touch Function



Dissipation Design



Waterproof Design



Housing Design



Fanless

IP65 chassis, IP65 connectors,
IP65 power adaptor (alternative)

Stainless steel

CPU	6th Gen Intel® Core™ i5-6300U Dual Core, 3M Cache, 2.30GHz CPU
Memory	2 x 204-pin SODIMM Dual-channel DDR3L 1333/1066MHz up to 16GB
Power Supply	Standard / IP65-rated DC in 12V or 19V ~ 24V external power adaptor
I/O Ports (Default)	2 x RS232, 2 x GLAN, 2 x USB, 3 x SATA socket
I/O Ports (Optional)	Any combination of up to 2 x RS232, 2 x RS232/422/485, 2 x GLAN, 6 x USB but totally no more than 6
Expansion	1 x Mini PCIe slot
Operation Temperature	0°C ~ 45°C
Storage Temperature	-10°C ~ 70°C
Relative Humidity	5% ~ 90% non-condensing
OS Support	Win 7 Pro, Embedded 7, Win 8 Pro, Embedded 8
Installation	VESA mount 100 x 100 mm
External Heat Sink	Yes (rear)
Optional Items	RFID sensor, Memory, Storage devices, WiFi, OS

Model Name		12V	UW-NNL15QF (4pt PCT, 12V) UW-NNL15RF (resist., 12V)					UW-NNL17QF (4pt PCT, 12V) UW-NNL17RF (resist., 12V)		
		19~24V	UW-NNL15QW (4pt PCT, 19~24V) UW-NNL15RW (resist., 19~24V)					UW-NNL17QW (4pt PCT, 19~24V) UW-NNL17RW (resist., 19~24V)		
Display	Size / Aspect Ratio	15" TFT (4:3)					17" TFT (4:3)			
	Backlight	LED					LED			
	Resolution	1024 x 768					1280 x 1024			
	Colors	16.7 M	16.7 M	16.7 M	16.2 M	16.7 M	16.7 M	16.7 M	16.7 M	
	Luminance (cd/m ²)	2000	1600	1000	1000	800	1600	1000	800	
	Contrast Ratio	700:1	700:1	1700:1	700:1	700:1	1000:1	1000:1	1000:1	
	Viewing Angle (H/V°)	160/160	160/160	170/170	160/160	160/160	170/170	160/160	170/170	
	MTBF (hrs)	70,000					70,000			
Touch Screen		4pt PCT / 5-wire resistive					4-point PCT / 5-wire resistive			
Dim. (W x H x D+heatsink, mm)		438.2 x 335 x 63 (+10)					470 x 390 x 67.1 (+10)			
Wt. (main unit + heatsink, kg)		11.5 (+1)					15.5 (+1)			
I/O Port's Location		Rear					Rear			

Model Name		12V	UW-NNL19QF (4pt PCT, 12V) UW-NNL19RF (resist., 12V)				UW-NNL21QF (4pt PCT, 12V) UW-NNL21ZF (10pt PCT, 12V)	
		19~24V	UW-NNL19QW (4pt PCT, 19~24V) UW-NNL19RW (resist., 19~24V)				UW-NNL21QW (4pt PCT, 19~24V) UW-NNL21ZW (10pt PCT, 19~24V)	
Display	Size / Aspect Ratio	19" TFT (4:3)				21.5" TFT (16:9)		
	Backlight	LED				LED		
	Resolution	1280 x 1024				1920 x 1080		
	Colors	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M	16.7 M	
	Luminance (cd/m ²)	1600	1000	1000	800	1600	1200	
	Contrast Ratio	1000:1	2000:1	1000:1	1000:1	900:1	1100:1	
	Viewing Angle (H/V°)	170/160	178/178	160/170	170/160	170/160	170/160	
	MTBF (hrs)	70,000				70,000		
Touch Screen		4pt PCT / 5-wire resistive				4/10-point PCT		
Dim. (WxHxD+heatsink, mm)		521.4 x 434.4 x 67.1 (+10)				607 x 401 x 67.1 (+10)		
Wt. (main unit + heatsink, kg)		16.5 (+1)				18.5 (+1)		
I/O Port's Location		Rear				Rear		



Inspiring a reliable solution



INTEGRAL SYSTEM SAS

36, rue Emile DECORPS | Pôle PIXEL – Bât 23

Tél : 04 37 69 72 00

info@integral-system.fr

www.integral-system.fr