

SH Series

SH10, SH12, SH15



The powerful computer for industry of the series SH in display sizes SH 10, SH 12 and SH 15 offer highly-robust, fan-less PC technology in a completely closed chassis for stationary as well as mobile use.

Industrial Computer for stationary as well as mobile use

The IPC have been developed and produced in-house. They are designed especially for operation in rough environments.

For this reason the series SH is made of modern industry-proven components, which ensure reliable performance under extreme conditions.



The IPC are based on an energy saving Intel® Dual Core-, Intel® Quad Core-, Intel® Core i3- or Intel® Core i5-architecture in an extreme slim and light chassis. By using LED displays they operate without any problems in temperature range of -35°C to +55°C. As touch components the industri- turable 2-tail technology with a very sturdy surface and a buffer layer are deployed.

The Industrial PC SH10, SH12 and SH15 have been designed especially for mobile use in industrial-, forklift-trucks or commis- sioning trucks. It can also be used stationary at the incoming goods area in logistic center and cold-stores. Its resistance on hard demands in production environments makes it eligible for successful operation in machine control or access control.

Highlights

- ❑ Completely closed fan-less chassis, developed and produced in Germany
- ❑ Extremely resistable against mechanical impacts as shock or vibration
- ❑ Allround protected against dust and humidity (IP65/67)
- ❑ Low temperature usage in a temperature range from -35°C to +55°C
- ❑ Especially slim and all the same robust chassis design
- ❑ Display with LED-Backlight, up to XGA and 500 cd/m² or Full HD
- ❑ Intel® Quad Core 4 x 1,91 GHz with 4 GB,
- ❑ Intel® Core i3 or Core i5 with 4 / 8 or 16 GB
- ❑ Windows® 7 Prof. and Windows® Emb. Standard 7 Windows® 10 or Windows® 10 IoT, Linux
- ❑ Motion sensor, programmable unit controller
- ❑ Extensive options like integrated LEGIC-reader or UHF reader for identification of pallets

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Technical Data SH10, SH12 und SH15

Chassis		Coated Aluminium, no-fan design
	Mounting	Bracket for stationary and mobile use
	Size	SH10: 278 x 223 x 64 mm, SH12: 325 x 254 x 64 mm, SH15: 380 x 305 x 64 mm
	Weight	SH10: 3,4 kg, SH12: 4,1 kg, SH15: 5,6 kg
Display LED (internal)		SH10: 10,4" Colour-TFT, SVGA 800 x 600, 400 cd/m ² , 4,8 watt
		SH12: 12.1" Colour-TFT, XGA 1024 x 768, 500 cd/m ² , 9,0 watt
		SH12: 12.1" Colour-TFT, XGA 1024 x 768, 1100 cd/m ² , 12,0 watt
		SH15: 15,0" Colour-TFT, XGA 1024 x 768, 400 cd/m ² , 9,5 watt
Touch-Screen		Resistive Analog-Touch-Screen, 4 or 8 Wire, Bufferlayer and Two-Tail connection
Architecture	CPU / RAM	Intel® E3845, 4 x 1,91 GHz Quad-Core, 4 GB RAM
		Intel® Core i3-5010U, 2 x 2,1 GHz, 4 / 8 or 16 GB RAM
		Intel® Core i5-5350U, 2 x 1,8 GHz, 4 or 8 GB RAM
	Sound	On Board: Intel® high definition audio (Intel® HD audio) incl. amplifier
Software	Operating-System	Windows® 7 Professional, Windows® Embedded 7 Windows® 10 or Windows® 10 IoT, Linux
	Emulation/Browser	VT100, VT220, IBM 5250, Wavelink, Freefloat, Naurtech
Software certified		Topsystem Pick by Voice, Citrix Client, SOTI, SAP Client
Reader		RFID Legic, Mifare, Hitag and UHF
Mass storage	SSD	80 to 600 GB, industrial incl. write-protect
	SDHC	16 to 64 GB
	CFast	16, 32, 64, 128 GB
Interfaces below	RS232	2 x RS 232, COM1 with 5 and COM 2 with 5/12 VDC available for scanner
	USB	1 x USB 3.0, 2 x USB 2.0
	RJ45	Ethernet 10/100/1000 MBit/s on Board
Interfaces on-top	USB	1 x USB, 1 x SDHC
	HDMI	1 x HDMI for monitor connection
	CFast	1 x CFast base
WiFi	WiFi, BT	1 x PCIe Mini Card for WiFi or combimodul WiFi/Bluetooth
	WiFi	IEEE 802.11 a / b / g / n, Bluetooth 4.0
Aerial		Dual aerial or TNC, RP-TNC for offset aerial
	Power supply (internal) for	
	AC voltage	110/230 VAC, 64 W, 50 to 60 Hz
	Direct current	12/24 VDC and 24/48 VDC voltage, 40 W, galvanically isolated, voltage lack up to 10 Volts for max. 20 ms bridgeable Internal USV optional 30 min.
Features	Power consumption	Typically 18 W to 40 Watt, Green Power EUP 2011 < 0,5 Watt idling cycle
	Automatic shut-off	Automatic switchoff via ignition signal or On/Off switch at the front Automatic brightness control for the display Screenblanking Status LED at the front for WiFi and Bluetooth
	Front keys	S1-S4, KEY request, light/dark
	Environmental conditions	
	Protective system	IP65 / IP67 (after approved assembly of the cable cover)
	Test symbol	CE Class A (Europe), FCC (USA), CSA (Canada), CCC (China)
	Temperature ranges	Operation: -35° to +55°C, Storage: -40° to +70°C
	Relative humidity	10% to 90% at 40°C, non-condensing
	Vibration/Shock	Class 5M3 at EN 60721-3-5: 1998 (landcrafts)