

# FLEXIBLE & SAFE **WIRELESS HMI**



**MORE FLEXIBLE, MORE EFFICIENT ... AND SAFE**

# WIRELESS INTO THE FUTURE

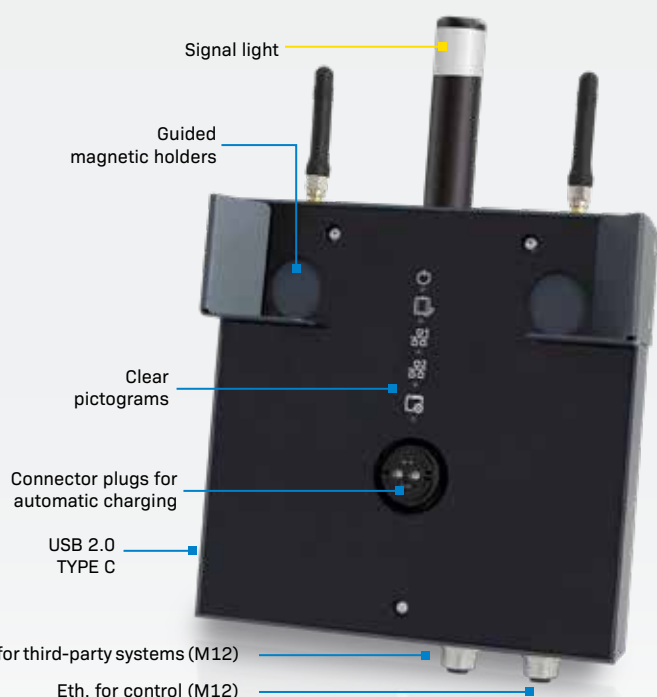
Freedom of movement is the magic word when configuring and operating machines, equipment and robots. With the wireless HGW 1033, operators can work close to the machine so that they can keep the process in full view. Thanks to the wireless technology, long HMI cables have been eliminated as trip hazards.

## WIRELESS AROUND THE MACHINE

For the industrial wireless operating solution, SIGMATEK uses a 2-component system consisting of the HGW 1033 panel and the base station BWH 001. The wireless HMI comes with a powerful EDGE2 Technology processor and 10.1-inch multi-touch display. Sophisticated visualization projects are thereby possible. The wireless runtime of the battery pack is two hours. Via standard interfaces and protocols such as Ethernet and OPC UA, the wireless operating solutions can be easily integrated into existing systems.

## BWH 001 BASE STATION

The base station, equipped with an EDGE2 Technology processor, USB and Ethernet interfaces, serves as a gateway with docking and charging function.



**BWH 001**

Active illuminated emergency stop

Status LEDs programmable

7-segment display

EDGE2-Technology processor

Realtime OS Salamander

10.1-inch multi-touch display



**HGW 1033-3 Front View**

## SAFETY TO GO

The wireless HMI is available with or without safety elements. Thereby the required safety of the machine operator in the industrial environment is ensured. In the TÜV-certified HGW 1033-3, an active illuminated emergency stop, confirmation switch and key switch are integrated into the grip unit.

## HIGH AVAILABILITY

To increase the quality of the wireless transmission in the immediate machine environment, a redundant transmission process is implemented. Safety and payload data are simultaneously transmitted over two separate WLAN frequencies – 2.4 and 5 GHz. Analogous to wired solutions, safety-relevant data is sent via the Black Channel principle. The reaction times are correspondingly short.

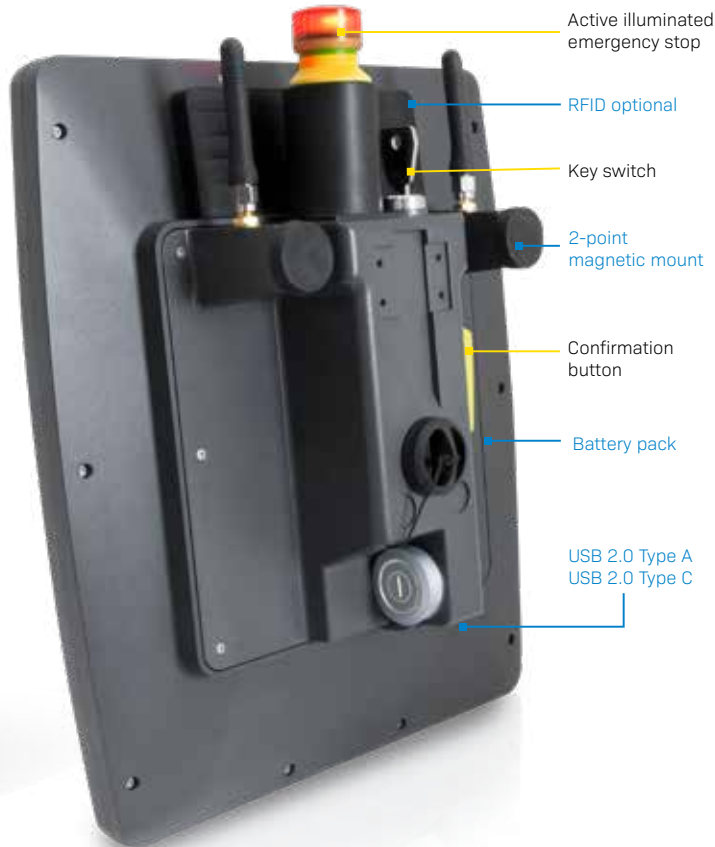
## WIRELESS ROAMING

When multiple base stations and HMIs are used for complex, very large-scale machines and systems, the “Wireless Roaming Feature” provides reliable and nearly unlimited coverage.

The HGW panel is directly coupled with the selected machine and safety control. The base station serves as the communication bridge between the wireless and cable-connected networks. Roaming means that an active connection exists over at least one of the two frequencies at all times.

By combining the interfaces of the base stations used, all network participants (“HGW”, machine/safety control) are connected over a single subnetwork. To operate the network at high performance with low latency, a VLAN (Virtual Local Area Network) can be used in an existing network infrastructure. This ensures that the performance is not affected by the data flow from higher-level company networks.

The operator wirelessly connects to the desired machine section. While the user moves along the system, a scan for the best network based on the current RSSI signal strength is performed. Switching networks can be triggered by a user action or automatically.



HGW 1033-3 Rear View

## SAFETY AT A GLANCE

The base station is coupled via optical feedback. On the 7-segment display of the operating panel, with which machine or system section the HGW 1033-3 is connected can be clearly seen. An active illuminated emergency stop switch provides the operator with certainty that the safety elements are linked to the system correctly.

## ONE PANEL FOR MULTIPLE MACHINES

With just one panel, multiple machines and system units can be operated without having to continuously reconnect. It is also no longer necessary to install a separate teach panel on each similar machine. This saves costs and raises the comfort for the machine operator.





## TECHNICAL DATA

WIRELESS PANEL	HGW 1033	HGW 1033-3	HGW 1033-32
ARTICLE NUMBER	12-246-1033 12-246-1033-01 landscape format	12-246-1033-3	12-246-1033-32
	<ul style="list-style-type: none"> <li>■ 10.1" Multitouch display (PCT)</li> <li>■ Resolution 800 x 1280 px</li> <li>■ EDGE2 Technology dual-core processor</li> <li>■ WLAN 2.4/5 GHz</li> <li>■ 1x USB 2.0 Type A, 1x USB 2.0 Type C</li> <li>■ Integrated battery 3780 mAh</li> <li>■ Dimensions 226 x 266 x 76 (B x H x T)</li> <li>■ Weight 1.27 kg</li> <li>■ Real-time operating system Salamander and visualization runtime system included</li> </ul>	<ul style="list-style-type: none"> <li>■ 10.1" Multi-touch display (PCT)</li> <li>■ Resolution 800 x 1280 px</li> <li>■ EDGE2-Technology dual-core processor</li> <li>■ WLAN 2.4/5 GHz</li> <li>■ 1x USB 2.0 Type A, 1x USB 2.0 Type C</li> <li>■ Emergency stop with illuminated status indicator, confirmation switch, key switch, SIL3/PLe</li> <li>■ Integrated battery 3780 mAh</li> <li>■ Dimensions 226 x 276 x 76 (B x H x T)</li> <li>■ Weight 1.35 kg</li> <li>■ Real-time operating system Salamander and visualization runtime system included</li> </ul>	<ul style="list-style-type: none"> <li>■ 10.1" Multi-touch display (PCT)</li> <li>■ Resolution 800 x 1280 px</li> <li>■ EDGE2-Technology dual-core processor</li> <li>■ WLAN 2.4/5 GHz</li> <li>■ 1x USB 2.0 Type A, 1x USB 2.0 Type C</li> <li>■ Emergency stop with illuminated status indicator, confirmation switch, key switch, SIL3/PLe</li> <li>■ 3 rotary encoders</li> <li>■ Integrated battery 3780 mAh</li> <li>■ Dimensions 226 x 276 x 96 (B x H x T)</li> <li>■ Weight 1.39 kg</li> <li>■ Real-time operating system Salamander and visualization runtime system included</li> </ul>
BASISSTATION	BWH 001		
ARTICLE NUMBER	12-246-001		
	<ul style="list-style-type: none"> <li>■ WLAN 2.4/5 GHz</li> <li>■ 2x Ethernet</li> <li>■ 1x USB Type C</li> <li>■ Signal light that blinks when the operating device is logging on for safe use</li> </ul>		

