

Hygienic Design

Signal Towers · completely  
pre-assembled · CleanSIGN



## CleanSIGN - The LED Signal Tower in Hygienic Design

WERMA already has the appropriate solution to the challenges engineers and food manufacturers will have to face in the future: **The LED signal tower CleanSIGN** has been specially developed and constructed for use in **food and hygiene areas** as well as **cleanroom applications**. Right from the start, existing standards and guidelines were given careful consideration (e.g. EHEDG\* Documents 8 and 13, Machine Directive 2006/42/EG), and experts in the field of Hygienic Design were called upon for advice.

The CleanSIGN is equipped with a series of sophisticated technical, constructional and design features which make a significant contribution to the safety of your products.

### What is Hygienic Design?

The term, "Hygienic Design", stands for the hygienic and cleaning-friendly design of all machinery and components deployed in hygiene-relevant areas. The aim is the prevention of constructional weakspots that could increase hygiene-related dangers and the risk of infection.

### What are the main applications?

In addition to use in food production, manufacturing processes in clean rooms are also potential application areas. The production and assembly of small and very sensitive parts such as electronic chips places the highest demands on air purity.

As the CleanSIGN LED Signal Tower fulfils the high **Air Cleanliness Class 1 or 2** (depending on version), it can be used in the semiconductor industry, microelectronics, medical research, pharmaceutical, optical and laser technology, aerospace engineering and nanotechnology.



### The key advantages

- ✓ Food safety due to the absence of uneven surfaces, elevated or countersunk elements where contamination could collect
- ✓ Cleaning-friendly and hygienic design for optimal cleaning and disinfection
- ✓ Use of food safe materials (FDA approval) and resistant to cleaning agents
- ✓ EHEDG\* and Fraunhofer approvals
- ✓ Bracket mounting fulfills Air Cleanliness Class 2 for Cleanroom applications in accordance with DIN EN ISO 14644-1
- ✓ Base or Ceiling mounting fulfills Air Cleanliness Class 1
- ✓ Bracket mounting with Pine Tree Clip® for quick and simple fixing
- ✓ Electronic modularity of the individual tiers
- ✓ Maintenance-free thanks to LED technology with a long life duration of up to 50,000 hrs



Fixed, three tier colour distribution in red, yellow and green



Air Cleanliness Class 1

In its inactive state, the signal tower blends into the background thanks to its translucent housing

- LED Signal Tower for use in clean-room applications (Fraunhofer IPA approval) and the food industry (EHEDG\* approval)
- Permanent lights in red, yellow and green
- Integrated, high output buzzer (85 dB)

Life duration up to 50,000 hrs

### TECHNICAL SPECIFICATIONS:

<b>Dimensions (L x H x W):</b>	Bracket mounting: 112 mm x 485 mm x 125 mm Base mounting: 112 mm x 391 mm x 125 mm
<b>Housing:</b>	PA, black
<b>Lens:</b>	PA, transparent
<b>Fixing:</b>	Wall mounting, integrated mounting bracket Base mounting, Ceiling mounting
<b>Connection:</b>	Cable, 2 m long, included in the assembly
<b>Current consumption:</b>	Optical: up to 120 mA per tier Buzzer: 20 mA

### ORDER SPECIFICATIONS:

Voltage	24 V DC
<b>CleanSIGN with Buzzer</b>	
Bracket mounting	695 300 55
Base or Ceiling mounting	695 310 55



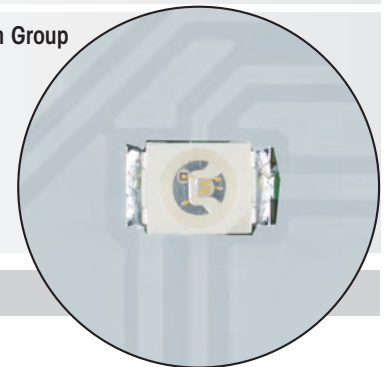
### ADDITIONAL INFORMATION:

• **Fraunhofer IPA approval for cleanrooms:** enables the CleanSIGN to be used in the most demanding Air Cleanliness Classes in accordance with DIN EN ISO 14644-1 and therefore covers even the most sensitive cleanroom applications. This approval also confirms the chemical resistance of the signal tower housing against common cleaning agents.

• **EHEDG\* approval for the food industry:** this approval confirms that strict design criteria have been met to avoid constructional weaknesses and to minimise the risk of contamination.

\* **EHEDG = European Hygienic Engineering and Design Group**

The goal of this consortium, made up of equipment manufacturers, food processing industries, research institutes and public health authorities, is the development and publishing of directives on hygiene technology for the processing and packaging of food products.



Fixed colour distribution with SMD technology

### TECHNICAL DIAGRAMS:

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See note on page 347

550 g

530 g

