

The first
EHEDG-approved
signal tower



CleanS/GN

The LED signal tower specifically
designed for the food processing
industry and cleanroom applications

Now for ceiling mounting in cleanrooms
or base mounting on machines and
production equipment with flat surfaces



Hygienic Design - The Background

CleanSIGN - The LED Signal Tower in Hygienic Design

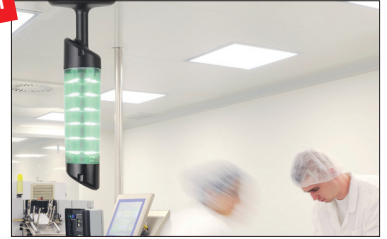
In the **food, drink and pharmaceutical industries**, as well as in **cleanroom applications**, high demands are placed on hygiene. This applies to employees as well as the machinery, equipment and supplementary components.

The danger of food poisoning, contamination and product recalls intensifies the pressure, increasing the need for reliable hygiene standards and rigorously implemented norms and guidelines. This begins with the construction and planning of new components and equipment.

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.

Hygienic Design



What Directives and Regulations are there?

WERMA's Hygienic Design is based on the following directives:

- Machine Directive 2006/42/EC (Appendix I, Point 2.1): Food processing machinery and machinery for cosmetics or pharmaceutical products
- DIN EN 1672-2-2005: Food processing machinery basic concepts, Part 2: Hygiene requirements
- EHEDG* Document 8: Hygienic equipment design criteria
- EHEDG* Document 13: Hygienic Design of equipment for open processing

* 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.



WERMA has the Solution

WERMA already has the appropriate solution to the challenges engineers and food manufacturers will have to face in the future: **The new LED signal tower CleanSIGN** from WERMA 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 and **experts in the field of Hygienic Design** were called upon for advice.

Thanks to its revolutionary form, its smooth surfaces and the materials employed, CleanSIGN meets the **high requirements of Hygienic Design**, thus making a significant contribution to the safe and clean manufacture of food and drink, cosmetics and pharmaceutical products.



What are the main applications?

The unique LED signal tower is now available in a base mounting version. As with the bracket mount version it is also equipped with a series of sophisticated technical, constructional and design features which make a significant contribution to the safety of your products.

In addition to use in food production, manufacturing processes in cleanrooms 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.

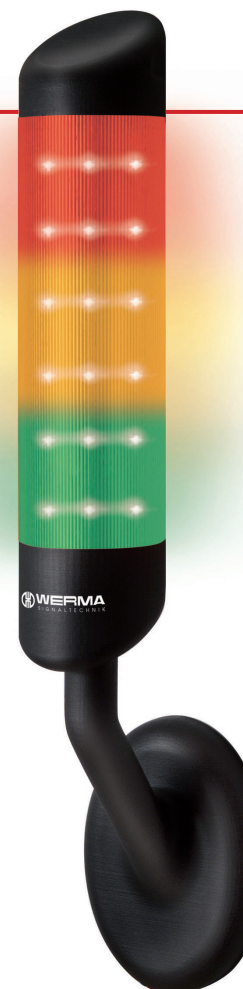
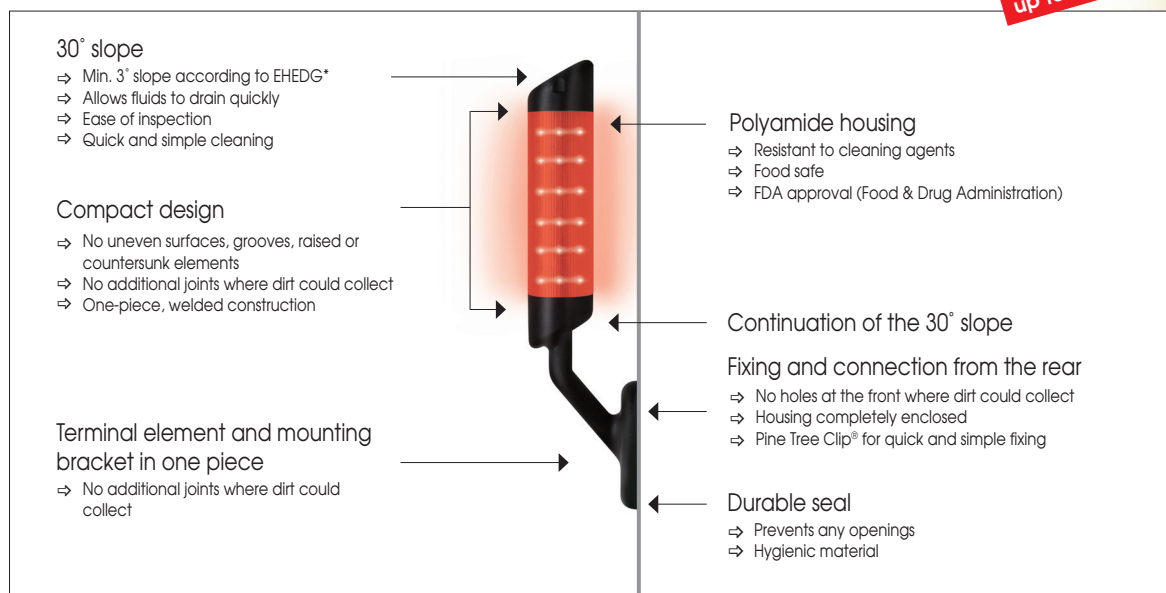
As the CleanSIGN LED Signal Tower fulfills the high **Air Cleanliness Classes 1**, it can be used in the semiconductor industry, microelectronics, medical research, pharmaceutical, optical and laser technology, aerospace engineering and nanotechnology.

The new base mounting version now also enables the signal tower to be easily fixed to cleanroom ceiling panels.

695 LED Signal Tower CleanSIGN

The new CleanSIGN from WERMA has been specifically conceived and developed for use in areas with strict hygiene requirements. Consequently, it is equipped with a series of **sophisticated technical, constructional and design features** which make a significant contribution to the safety of your products. For example, the CleanSIGN has **no grooves or joints** where dirt could collect, facilitating **quick and easy cleaning**.

Unique "Hygienic Design" Signal Tower



Air Cleanliness Class 1

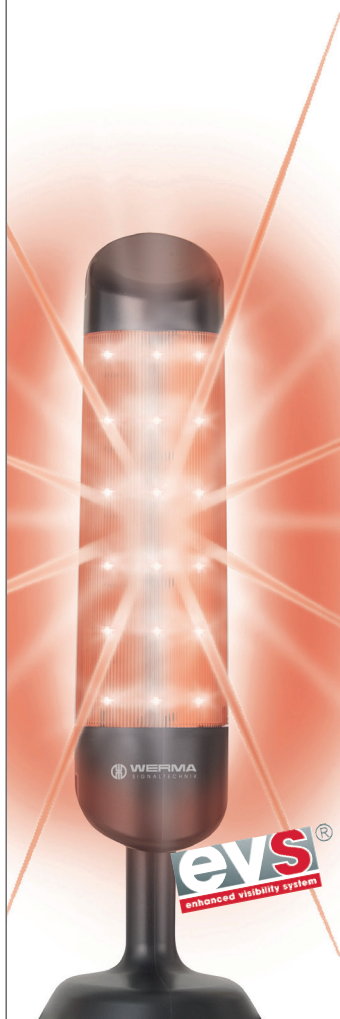
The key advantages

- Food safety due to the absence of uneven surfaces, raised or countersunk elements where dirt 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 IPA approved**
- **Fulfills Air Cleanliness Class 1 for Cleanroom applications in accordance with DIN EN ISO 14644-1**
- IP 67/IP 69k protection rating
- Maintenance-free thanks to LED technology with a long life duration of up to 50,000 hours
- Pine Tree Clip® for quick and simple fixing (wall mounting version)
- Electronic modularity of the individual tiers
- Integrated, high-output buzzer



What benefits do you enjoy?

- ① High safety and quality of your products
 - Prevents impurities
 - Reduces the risk of contamination
- ② Reduces the cleaning workload
 - Cleaning-friendly design simplifies residue-free removal of contaminants
 - Quicker, more efficient cleaning saves energy, material and cleaning agents
- ③ Higher productivity
 - Reduction of equipment down-time leading to lower operating costs
 - Maintenance-free LED technology with a life duration of up to 50,000 hours



695 LED Signal Tower CleanSIGN

NEW

- Now for ceiling mounting in cleanrooms or base mounting on machines and production equipment with flat surfaces
- LED Signal Tower for use in cleanroom (Fraunhofer IPA approval) and the food industry (EHEDG* approval)
- Hygienic and cleaning-friendly design
- Resistant to cleaning agents
- Flexible colour distribution thanks to electronic modularity
- LED permanent light with additional light effects depending on variant
- Integrated, high-output buzzer (85 dB)



TECHNICAL SPECIFICATIONS:



Dimensions (L x H x W):	112 mm x 485 mm x 125 mm (Wall mounting) 112 mm x 391 mm x 125 mm (Base mounting, Ceiling mounting)
Housing:	PA, black
Lens:	PA, transparent
Fixing:	Wall mounting with integrated mounting bracket, Base mounting, Ceiling mounting
Connection:	RGY and RGB LED versions: Screwable connection, max. 1.5 mm ² SMD technology version: Cable, 2m long, included in the delivery
Operating voltage:	24 V =
Current consumption:	Optical: max. 250 mA per tier (depending on colour/variant) Buzzer: 20 mA

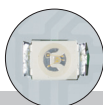


VARIANTS AND ORDER SPECIFICATIONS:



- ▶ LED Permanent lights in red, yellow and green (SMD technology)
- ▶ Preset, three-tier colour distribution in red, yellow and green
- ▶ In its inactive state, the signal tower blends into the background thanks to its translucent housing
- ▶ Integrated, high-output buzzer (85 dB)

Fixed colour distribution with SMD technology



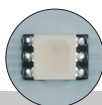
Order No.

Wall mounting 695 300 55
Base mounting, Ceiling mounting 695 310 55



- ▶ LED Permanent lights in red, yellow and green (RGY-LEDs)
- ▶ Attention-grabbing illumination in one colour (can be triggered externally)
- ▶ The colours red, yellow and green can set via DIP switch for any required order or distribution
- ▶ Integrated, high-output buzzer (85 dB)

Completely flexible colour Distribution thanks to RGY LEDs



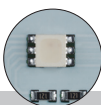
Order No.

Wall mounting 695 200 55
Base mounting, Ceiling mounting 695 210 55



- ▶ LED Permanent light and additional light effects
- ▶ 7 colours: red, yellow, green, clear, blue, violet, turquoise (RGB LEDs)
- ▶ Complete illumination in one colour possible (can be triggered externally)
- ▶ Colour distribution can be selected and adjusted via DIP switch as required
- ▶ The "EVS" light effect ensures a maximum attention-grabbing effect (can be set with complete illumination)
- ▶ Integrated, high-output buzzer (85 dB)

7 colour settings from RGB LEDs



Order No.

Wall mounting 695 000 55
Base mounting, Ceiling mounting 695 010 55