

# Process-optimisation systems for production logistics and shipment

Easy to retrofit. Ready to use straight out of the box.





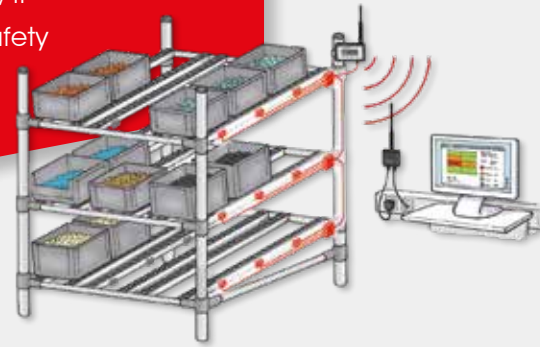


### WERMA – NEW SOLUTIONS FOR LOGISTICS AND PACKING APPLICATIONS

As the inventor of the modular signal tower, we supply **optical and audible signalling devices** for logistics and manufacturing applications. A world first – our signal towers can be transformed into intelligent **wirelessly connected call and messaging systems**. In contrast to conventional andon tools, these not only display faults, but also seamlessly **document and analyse** any malfunctions. This allows you to optimise your processes at packaging and shipping stations.

## StockSAVER

StockSAVER implements a third-generation kanban system for production logistics. This simple retrofit solution for all FIFO flow racks solves all of the typical issues with Kanban systems, creates considerably more space in production areas for value adding activities and increases cash flow. As StockSAVER provides automatic material replenishment requests, it eliminates the margin for human error and the need for line-side safety stocks.



### StockSAVER: THE THIRD-GENERATION KANBAN SYSTEM

#### First generation Kanban systems: Kanban cards

Problems: delays in handing over cards, cards are mislaid or are not collected, little transparency.

#### Second generation Kanban systems: Use of scanners

Problems: disruptions due to incorrect bookings, forgetting to scan, incorrect stock replenishment, etc. → the digital system world does not correspond with reality.

#### Third generation Kanban systems:



- Sensors determine the actual material stock levels present in the rack.
- Human errors are eliminated and the familiar Kanban problems are resolved (lack of stock is not recognised in good time, Kanban cards cannot go missing etc.).
- This makes it possible to halve the stock level in the FIFO rack.

## YOUR BENEFITS



### IMPROVE YOUR CASH FLOW

- Reduce stock levels and improve your cash-flow
- Emergency stocks no longer necessary
- Get your safety stock under control, even with a diverse range of parts



### REDUCE ERRORS

- Solve existing Kanban problems (e.g. Kanban cards being lost)
- Scanning processes are no longer required - replenishment is triggered automatically
- No duplication of bookings
- React flexibly, in real time



### HALF THE NUMBER OF FLOW RACKS

- Halve your FIFO rack area and solve your space problems
- Safety stocks no longer required (without the risk of material running out)
- More space on the assembly line
- Create space for value adding processes



### COMPLETE SOLUTION FROM A SINGLE SOURCE

- Fully configured kits (hardware and software)
- Simple commissioning and use (no external project or consultancy costs)
- Intuitive software (standalone or integrated into the company network)



## THE SYSTEM

The fully configured kits for your flow racks are delivered ready for immediate installation. StockSAVER is maintenance-free, easy to retrofit and monitors the stock levels of your FIFO flow racks as a signal point in the logistics chain. The data is transmitted wirelessly and displayed in the software which is supplied with the package. You will also profit from the long-term benefits of the analysis module, which can help you to improve your processes. The material movement data export provides the opportunity to optimise the replenishment process.

## StockSAVER - Kits and Part numbers

<b>Starter Kit 50/2</b>	<b>865.000.01</b>	Kit with Transceiver for 50 locations with 2 sensors per location (including software). Contains: 1x Transceiver, 1x SmartBOX, 50 x SensorBOXes, 100 x Sensors
<b>Starter Kit 50/4</b>	<b>865.000.02</b>	Kit with Transceiver for 50 locations with 4 sensors per location (including software). Contains: 1x Transceiver, 1x SmartBOX, 50 x SensorBOXes, 200 x Sensors
<b>Extension Kit 50/2</b>	<b>865.000.03</b>	Kit without Transceiver for 50 locations with 2 sensors per location (including software). Contains: 1x SmartBOX, 50 x SensorBOXes, 100 x Sensors
<b>Extension Kit 50/4</b>	<b>865.000.04</b>	Kit without Transceiver for 50 locations with 4 sensors per location (including software). Contains: 1x SmartBOX, 50 x SensorBOXes, 200 x Sensors
<b>Tool Kit</b>	<b>865.000.29</b>	Tool kit contains: 1x Parallel-action pliers 1x Automatic wire-stripper for BUS cable 1x Automatic wire-stripper for Sensor cable
<b>Extension Set</b>	<b>865.000.30</b>	Extension set to extend sensor cables when re-configuring locations, Contains: 30 x sensor connectors, 15 x sensor couplers
<b>Sensor Cable for Extension Set</b>	<b>865.000.33</b>	30 m

### SmartBOX

Receives the data from the SensorBOXES and transmits this to the Transceiver via a wireless network. **OPTIONAL:** If the universal interface is used (e.g. RFID or barcode scanner), the SmartBOX gives an immediate warning, on site, of misplaced items and requests a correction.

### SENSORS

Detect the number of bins and transfer this data to the SensorBOX.

### SensorBOX

Receives the sensor status of up to 4 bins per shelf location and transfers this data to the SmartBOX.

### TRANSCEIVER

Receives the status of the SmartBOXES and transfers this data to the StockSAVER software.



SOFTWARE



SENSOR



SensorBOX



SmartBOX



TRANSCEIVER



## AndonSPEED

With AndonSPEED you can optimise your processes for manual stations and for packaging and shipping stations. Because AndonSPEED provides a visual display of problem areas – at the push of a button. Permanent time-savings are possible thanks to quick fault correction. The system can also transfer the calls for action wirelessly to a central control station and send e-mail alerts automatically.

## Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Quick fault repair enabling more "units per hour"

- Intelligent reporting for lasting improvements
- Optimisation potential is made transparent

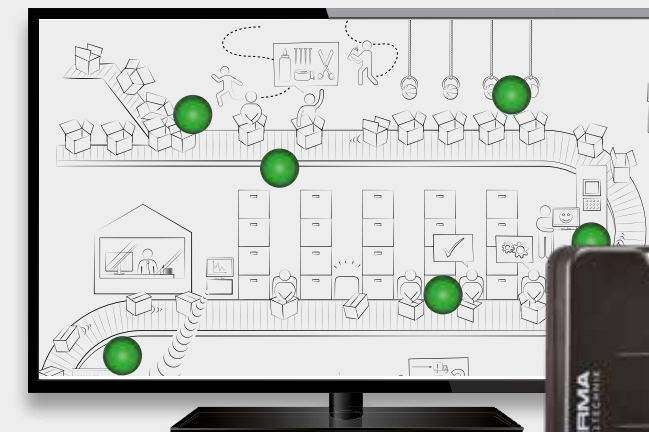


## Typical applications

- Report stoppages on chutes or conveyor belts
- Manage the supply of materials to packaging stations
- Report missing items at the shipping station
- Process improvement in shipping areas

## Features

- Robust, proven wireless network for production environments
- Licence-free software is included
- Integrated analytics and reporting tools
- Ability to implement a head-of-line function, for example, with slave control

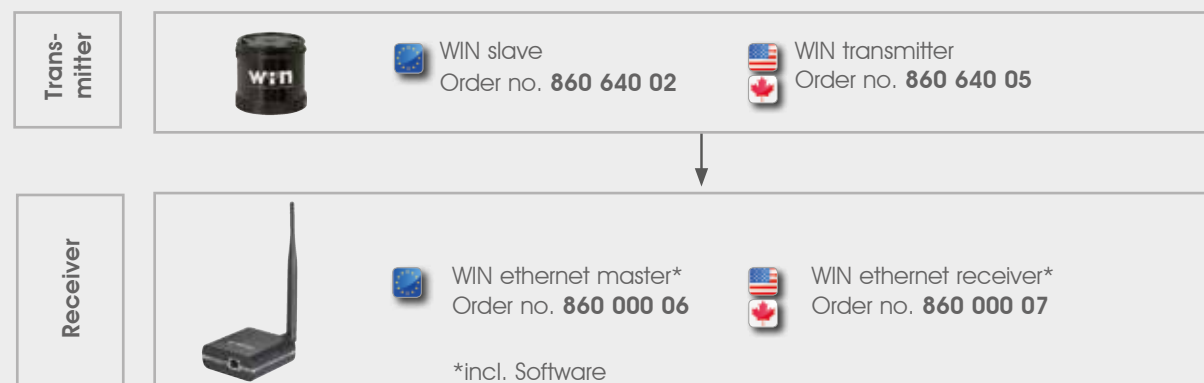




## 1. Andon Product



## 2. Wireless Networking



## 3. Signal Tower



Further accessories can be found in our current catalogue or at [www.werma.com](http://www.werma.com)



## AndonLIGHT

Provides an introduction to professional call for action systems: the easy-to-retrofit Andon products in combination with WERMA KombiSIGN 72 signal towers. With these products it is easy to improve safety and efficiency in the workplace.



## Your benefits

- Rapid assistance reduces wait times
- Reduces response times and prevents shutdowns
- Intuitive and self-explanatory light system
- More reliability and efficiency (no running around looking for help)
- It can be expanded to a wireless network system at any time

## Typical applications

- Professional signalisation of problems at the workstation
- Manage supply of materials to workstations
- Optimise processes

## Features

- Up to eight different statuses
- Signal directly on the signal tower with AndonCONTROL
- Activate signals on the signal tower with Andon SmartBOX





## 1. ANDON PRODUCT

Base mounting	Aluminium profile mounting / Wall mounting
 <p>AndonCONTROL Order no. <b>860 640 07</b></p>	 <p>Andon SmartBOX incl. Power supply Order no. <b>860 000 09</b></p>

## 3. Signal Tower

SIGNAL ELEMENTS (UP TO A MAXIMUM OF 4)			PRE-ASSEMBLED SIGNAL TOWER	
			Base mounting	Tube mounting
 8 tone siren DesignLOOK Order no. <b>645 790 75</b>	 8 tone siren ClassicLOOK Order no. <b>645 890 75</b>		 TwinLIGHT DesignLOOK Order no. <b>649 001 01</b>	 TwinLIGHT DesignLOOK Order no. <b>649 001 02</b>
 2 tone siren DesignLOOK Order no. <b>645 770 75</b>	 2 tone siren ClassicLOOK Order no. <b>645 870 75</b>			
 TwinLIGHT DesignLOOK red Order no. <b>647 130 75</b>	 TwinLIGHT ClassicLOOK red Order no. <b>647 110 75</b>			
 TwinLIGHT DesignLOOK green Order no. <b>647 230 75</b>	 TwinLIGHT ClassicLOOK yellow Order no. <b>647 310 75</b>			
 TwinLIGHT DesignLOOK yellow Order no. <b>647 330 75</b>	 TwinLIGHT ClassicLOOK green Order no. <b>647 210 75</b>			
 TwinLIGHT DesignLOOK clear Order no. <b>647 430 75</b>	 TwinLIGHT ClassicLOOK clear Order no. <b>647 430 75</b>		 TwinLIGHT ClassicLOOK Order no. <b>649 000 01</b>	 TwinLIGHT ClassicLOOK Order no. <b>649 000 02</b>
 TwinLIGHT DesignLOOK blue Order no. <b>647 530 75</b>	 TwinLIGHT ClassicLOOK blue Order no. <b>647 510 75</b>			
Base mounting	Tube mounting	Bracket mounting		
 Terminal element Order no. <b>640 800 00</b>	 Terminal element + Base with integrated tube Order no. <b>640 810 00 + 975 840 10</b>	 Terminal element + Bracket for base mounting Order no. <b>640 800 00 + 960 000 02</b>		
 Terminal element Order no. <b>640 900 00</b>	 Terminal element + Base with integrated tube Order no. <b>640 910 00 + 960 000 51</b>	 Terminal element + Bracket for base mounting Order no. <b>640 900 00 + 960 000 53</b>		

Further accessories can be found in our current catalogue or at [www.werma.com](http://www.werma.com)



## TRAFFIC LIGHTS

The traffic light range provides effective and reliable signalling in single or combination lights.



## Your benefits

- Cost-effective traffic light with LEDs and clear lenses
- Easy installation in just a few steps and with any combination of 4 lights
- RGY version: reduction in number of variants by combining three colours in a single product – Ideal where space is restricted
- Additional high-output audible signalling of up to 110 dB(A) available in combination with multi-tone sound-er/vocal alarm 190
- Extremely robust: available up to IP 69K



Traffic Light

Protection rating	IP 65
Dimensions (Ø x H)	150 mm x 154 mm
Housing	PC/ABS blend, grey
Lens	PC, transparent
Cable entry	From top or bottom with cable gland M20 x 1.5 mm or from the back with rubber grommet Ø 6-12 mm, included in assembly.
Connection	CAGE CLAMP® 0,5 - 1,5 mm²
Fixing	Base mounting, bracket mounting (accessory), tube mounting (accessory)
Installation position	As required
Life duration	Up to 50.000 h

890 - LED Traffic Light

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 200 mA	< 35 mA
red	890 120 55	890 120 68
green	890 220 55	890 220 68
yellow	890 320 55	890 320 68

890 - LED Permanent Light RGY

Voltage:	12-24 V DC	115-230 V AC
Current consumption:	< 220 mA	< 40 mA
RGY (red, green, yellow)	890 480 55	890 480 68



Accessories

FIXING BRACKET	
Fixing bracket for one beacon	975 890 33
Fixing bracket for two beacons	975 890 34
Fixing bracket for three beacons	975 890 35
Fixing bracket for four beacons	975 890 37
CONNECTING GROMMET	
Connecting grommet for traffic light combinations	975 890 25

Nutzen Sie unsere Konfiguratoren unter [www.werma.com](http://www.werma.com), um einfach die richtige Kombination zusammenzustellen.

Traffic Light

Protection rating	IP 69k
Dimensions (L x H x W)	2 tier: 85 mm x 309 mm x 136 mm 3 tier: 85 mm x 394 mm x 136 mm
Housing	PC-ABS, grey
Cable entry	Cable diameter max. 13 mm
Fixing	Wall mounting, tube mounting (accessory)
Connection	Screw terminal 0,5-1,5 mm²
Installation position	Vertical/hanging
Duty cycle	100 %
Life duration	Up to 50.000 h

894 - LED Traffic Light

Lens:	PC, clear transparent	
Voltage:	24 V DC	115-230 V AC
Current consumption:	< 60 mA (red/yellow)	< 30 mA per tier at
	< 120 mA (green)	230 V/50 Hz
red/green	894 160 55	894 160 68
red/yellow/green	894 180 55	894 180 68

894 - LED Traffic Light / Siren Combination

Lens:	PC, clear transparent	
Tone type:	Continuous tone	
Voltage:	24 V DC	115-230 V AC
Current consumption LED:	< 60 mA (red/yellow)	< 30 mA per tier
	< 120 mA (green)	at 230 V/50 Hz
Current consumption Siren:	< 20 mA	< 30 mA at 230 V/50 Hz
	red/green	494 160 55      494 160 68
	red/yellow/green	494 180 55      494 180 68



894 - LED Traffic Light

Lens:	PC, colored transparent	
Voltage:	24 V DC	115-230 V AC
Current consumption:	< 60 mA (red/yellow)	< 30 mA per tier at 230 V/50 Hz
	red/green	894 060 55      894 060 68
	red/yellow/green	894 080 55      894 080 68

894 - LED Traffic Light / Siren Combination

Lens:	PC, colored transparent	
Tone type:	Continuous tone	
Voltage:	24 V DC	115-230 V AC
Current consumption LED:	< 60 mA (red/yellow)	< 30 mA per tier at 230 V/50 Hz
	< 20 mA	< 30 mA at 230 V/50 Hz
Current consumption Siren:	red/green	494 060 55      494 060 68
	red/yellow/green	494 080 55      494 080 68





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**Please note:**

This is just a small selection from our product range. Further products can be found in our current catalogue or at [www.werma.com](http://www.werma.com).



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