

- Sturdy aluminium design  
Especially robust and weatherproof with short metal-free zone
- Optimal protection for hackers and OSB flakers
- Highest search performance and noise immunity  
4-quadrant technology, Power Drive (booster) option
- Maintenance-free  
Automatic calibration and automatic balance control
- Easy installation and intuitive operation
- Remote control and remote maintenance (SHARKNET® option) with documentation of all settings, metal messages etc.



- Standard aperture width up to 2 m x 1.6 m (other sizes on request)
- Simple setup: TeachAssistant
- Simple operation: intuitive and multilingual
- Password protection incl. rights management
- Remote control and remote maintenance via the company network using SHARKNET software (option)
- Extended temperature range down to -40°C / -40°F with specially adapted sensor and specially equipped control unit (option)



METAL SHARK® BIG – perfectly suited for use in the wood yard.

## Scope of Delivery:

- Detection unit (sensor) BIG
- Control unit in electric control cabinet with current METAL SHARK® electronics

## Accessories & Extras:

- Separate mounting of the control unit (wall mounting, up to 30m connection cable to the sensor)
- Xenon warning flashlight
- Acoustic signaling devices
- SHARKNET® for remote control and remote maintenance and data recording
- Power Drive signal amplification for further improved search performance and for particularly difficult operating conditions
- Extended temperature range to below -40°C / -40°F

## Function:

The METAL SHARK® BIG with rectangular opening is specially designed for large products such as logs, bales and recycled wood.

Thanks to its robust design, it is particularly suitable for industrial use on rough terrain such as the timber yard. The typical installation is in a trough conveyor with flat belt, or in a specially prepared vibratory conveyor.

Using 3D detection technology, it detects magnetic and non-magnetic metal contaminants (iron, stainless steel, aluminium etc.) precisely and reliably even under difficult conditions.

## Application:

- Protection of processing machines from metal parts
- Monitoring of large general cargo - especially suitable for tree trunks
- Monitoring of bulk materials like wood chips
- Use preferably on trough conveyor belts

## Industries:

- Wood industry
- Recycling, reusable material processing
- paper, cardboard
- Textile and fleece
- Plastics



Precise and accurate results even under extreme weather conditions.

**Specifications:**

Elektronics	Digital signal processor, digital frequency generation, digital balance control, automatic calibration, digital noise filters, integrated flexible control functions
Input	2 analog 0...10 VDC (option: 4-20 mA) 8 freely configurable 24 V DC signals, e.g. for encoders, product recognition, buttons
Output	2 floating: "error" and "metal" 8 freely configurable 24 V DC signals, e.g. solenoid valve, optical/acoustic alarm
Inspection method	High-frequency magnetic field, multi-channel operation, balanced receiver coils
Metal detection	Ferrous, non-ferrous (e.g. tombac, brass, aluminium, lead etc.) and stainless steel
Product compensation	250 memory locations, TeachAssistant
Enclosure rating	IP 65
Environmental conditions	-30°C to +40°C / -22°F to +104°F UL version: -20°C to +40°C / -4°F to +104°F, option: to -40°C / -40°F or +55°C / +131°F rel. humidity 20% to 90% non-condensing >95% relative humidity (condensing) with closed switch cabinet
Temperature of goods inspected	Up to 70°C / 158°F
Power Supply	1 phase I 10-230 V AC +/- 5% 20 W type. (60 W max.)
Interface	RS232, LAN (optional, for SHARKNET®), USB (optional)
Maintenance	Maintenance-free, sensors calibrate themselves
Diagnostics	Integrated diagnostic software, automatic self-test



**Upgrades:**

SHARKNET®	The SHARKNET® software connects METAL SHARK® metal detectors to a central computer and offers central storage of all operating data as well as batch and alarm documentation and remote control and remote maintenance from a PC.
Fast Power Drive (FPD)	Improves metal detection and reliability in industrial environments that do not meet electromagnetic compatibility standards, various IP protection classes possible, ATEX Zone 22 possible
Temperature extension (cold)	Temperature range extended to -40°C / -40°F Resin seals remain elastic at low temperatures. Special insulation, heated enclosure and other features
Temperature extension (hot)	Temperature range extended to +55°C / +131°F Adapted enclosure, additional thermal insulation, replaceable filter fan, heat exchanger and/or active cooling units

**Sensitivities:**

Measured sensitivities for exemplary measures:

width	Aperture (mm)		Edges	Sensitivity FE (size nuts)	
	height			Center	
600	600	600	M3	M5	
700	700	700	M4	M6	
900	900	900	M4	M8	
1.200	1.200	1.200	M4	M10	
1.300	1.300	1.300	M5	M12	
1.500	1.500	1.500	M6	M16	
1.700	1.700	1.700	M8	M18	
2.000	2.000	2.000	M10	M20	

The sensitivities are highly dependent on the environment in which a metal detector is installed. The sensitivities mentioned here should therefore only be regarded as guide values.

**Accessories:**



Flashing light XENON red  
Very bright conspicuous optical alarm, 24V DC, IP 65  
RB 10-100V 2W Xenon beacon  
suitable for tripod or wall mounting



Alarm horn  
Alarm transmitter with very loud acoustic signal, 24 V/DC  
suitable for tripod or wall mounting



Flash light + horn on tripod  
Acoustic and optical alarm transmitter on stand, stainless steel,  
with bright Xenon flashing light red and horn for conveyor belt mounting

**The CASSEL quality promise:**

As a premier manufacturer, CASSEL is committed to the highest quality standards. For more than twentyfive years, our goal has been to ensure the uncompromising quality of your products. We supply customers worldwide in various industries, including food, plastics, pharmaceuticals, textiles, lumber and mining.

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