

- Sturdy aluminium design
particularly robust, weatherproof, with short metal-free zone
- Highest detection performance and noise immunity
4-quadrant technology, Power Drive option
- Perfectly suited to the monitoring of entire timber logs
- 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 alarms etc.



- Standard opening width up to 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 with specially adapted sensor and specially equipped control unit (option)



METAL SHARK BIG RD – perfect for use in the wood industry.

Function:

METAL SHARK® RD is specially designed for industrial use in the timber industry and in sawmills. It detects magnetic and non-magnetic metal contaminants (iron, tombac, brass, stainless steel, etc.) precisely and reliably even under difficult conditions.

Due to its round shape it is ideal for monitoring logs for metal parts such as nails, screws, shrapnel or bullet fragments etc.

It is typically installed in troughed conveyor belts.

Applications:

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

Industries:

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

Scope of Delivery:

- Detection unit (sensor)
- 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



Round shape for optimal detection of metals in tree trunks.

Specifications:

Electronics	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 mode, balanced receiver coils
Metal detection	Iron, non-ferrous (e.g. tombac, brass, bronze, aluminium, lead etc.) and stainless steel
Product compensation	250 memory spaces, TeachAssistant
Enclosure rating	IP 65
Environmental conditions	Standard: -30°C to +40°C / -22°F to +104°F UL version: -20°C to +40°C / -4°F to +104°F Optionally: to -40°C / +40°F or +55°C / +122°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 110-230 V AC +/- 5%, 20 W typ. (60 W max.)
Interface	RS232, LAN (optional, for SharkNET), USB (optional)
Maintenance	Maintenance-free, sensors calibrate themselves
Diagnosis	integrated diagnostic software, automatic self-test



Upgrades:

SHARKNET®-2	The SHARKNET® software connects METAL SHARK® metal detectors with a central computer, providing centralized storage of all operating data plus batch and alarm documentation for HACCP and IFS compliance.
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:

Ø Aperture	FE Edges	FE Center
800 mm	6 mm	10 mm
900 mm	6 mm	10 mm
1000 mm	6 mm	10 mm
1100 mm	6 mm	10 mm
1200 mm	6 mm	10 mm
1300 mm	8 mm	12 mm
1400 mm	8 mm	14 mm
1500 mm	8 mm	14 mm
1600 mm	10 mm	16 mm

Disclaimer: Sensitivities largely depend on ambient conditions as well as on the properties and conditions of the goods to be inspected. The dimensions listed above are provided for general indication only. Please note that these dimensions are not contractually guaranteed.

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

CASSEL Quality:

As a premier manufacturer, CASSEL is committed to the highest quality standards. For more than twenty-five 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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