# **b.guard**

Condition Monitoring System Planning. Detecting. Preventing.



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### www.bachmann.info

CMSlight EN | Subject to technical changes © 10/2024 by Bachmann electronic

# 4 REASONS FOR CMSlight

### Reduces system costs

**CMS**light was designed with the goal of achieving the lowest possible costs for retrofits and replacements. The hardware is limited to the reliable collection of dedicated measurement data and sending it to a central server unit for further processing, data analysis and diagnostics.

# Generates precise maintenance and repair planning data

**CMS**light uses reliable and robust IEPE sensors and can image high sampling rates. The result is high availability and quality of the aggregated measurement data, which enables a reliable maintenance strategy.

## High level of standardization, low costs

**CMS**light fits seamlessly into the highly efficient and proven WebLog Suite with its recorded measurement data. Here, the data from all Bachmann CMS and third-party systems is processed at the highest level in a standardized way and, if necessary, merged with other measurement and operating data.

## Low installation costs

**CMS**light is designed to be ultra-compact and easy to use, so that only the slightest effort is required for installation and commissioning.





the power to control

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# **CMS**light – the Game Changer

Condition Monitoring Systems – and you win the game.

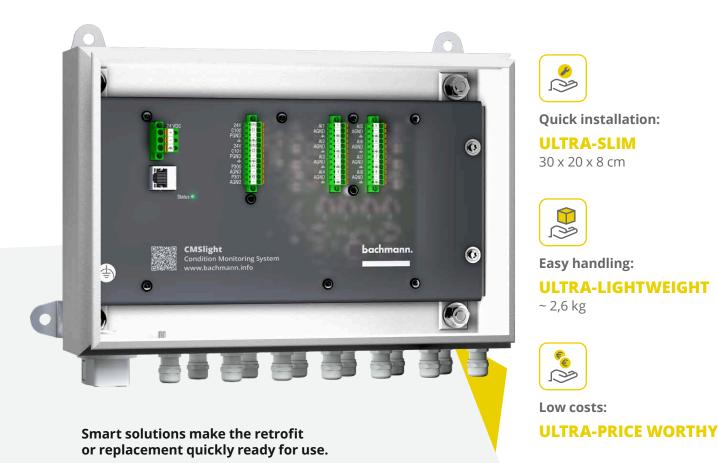


# Definitely a Game Winner for our Customers

CMSlight – Quality data equals quality results

Game Changer: With our **CMS**light, we are opening up the lower price sector for professional condition monitoring systems. At the same time, we remain fully committed to our quality standards, which makes **CMS**light a game changer for our customers in particular.

The basis of reliable monitoring is the high-quality acquisition of sensor signals. **CMS**light makes no compromises and feeds the recorded data into our server-based WebLog suite, where it is analyzed and informative reports are generated.



CMS light perfectly meets the market demand for a simple yet high-quality and

secure CMS solution at lowest costs. The use of IEPE sensors from Bachmann

or the use of existing IEPE sensors enables a wide range of applications when

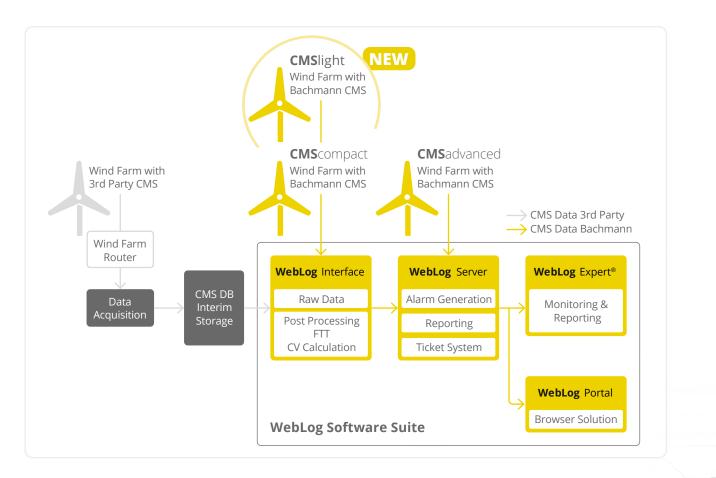
retrofitting or replacing old CMS. In this way, CMS light is particularly suitable for

monitoring the drivetrain of existing systems with a strong focus on minimizing

costs to minimize the risk of undetected drivetrain failures.

### The Benefit – Comprehensive

The WebLog suite not only accesses Bachmann's own CMS data, but also processes measurement data from 3rdparty CMS. Our system solution is best equipped for all wind farm configurations and also reduces training and system maintenance costs – just one software for monitoring, alarm generation, reporting, ticketing, and much more.



### IEPE in place of MEMS - reliable sensors

**CMS**light supports high-quality IEPE sensors and enables sampling rates of up to 25.6 kHz. In combination with high sampling rates, IEPE sensors ensure a significantly higher signal quality compared to low-cost MEMS sensors, especially for critical low-speed components. They are also much more robust and durable. High data quality allows reliable diagnostics and thus actively offers operational safety. Only the best is good enough for our customers.

### The Benefit – Clarity

Installation and operating costs are minimal. The results of data analysis considerably improve the reliability of information for more effective maintenance and repair scheduling. CMS light is our 100%
competitive solution
for simple retrofitting
and replacement.
And all in the highest
Bachmann quality.«

Marc Thomsen

Product Manager

Bachmann Monitoring GmbH

# **Overview of Bachmann CMS solutions**

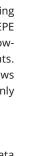
Performance comparison

All product lines are based on quality, robustness and intelligent system design. **CMS**light, **CMS**compact and **CMS**advanced are designed for different requirements and areas of application.

**CMS**light is the optimal low-cost solution that focuses on basic drivetrain monitoring, while **CMS**advanced delivers a complex, expandable, and modular condition monitoring system for comprehensive wind turbine monitoring. **CMS**compact fits in between as a middle-class solution.



Functions	<b>CMS</b> light	<b>CMS</b> compact	<b>CMS</b> advanced	Extended applications for <b>CMS</b> advanced
High-quality drivetrain monitoring	$\checkmark$	$\checkmark$	$\checkmark$	
Sampling rate up to	25.6 kHz	51.2 kHz	51.2 kHz	
IEPE Sensors	$\checkmark$	$\checkmark$	$\checkmark$	
Optional field bus support		$\checkmark$	$\checkmark$	Use of external sensor information for advanced signal processing and data correlation
Oil particle counting		$\checkmark$	$\checkmark$	Connection of oil particle counters
Extended range of functions and modular expandable input channels			$\checkmark$	Extension of the sensor scope for complex drive train designs and SHM tasks and everything for perfect customization
DNV certified			$\checkmark$	Compliance with offshore requirements



**S**pecification

- Server-based data processing
   using WebLog Interface
- 24 VDC power supply (power consumption < 10 W)</li>
- 8 IEPE channels, 2 speed inputs, 2 analogue inputs
  - Very compact and light cabinet

### We account for everything

**CMS**light provides reliable data aggregation and secure data transfer to our WebLog Interface – where all calculations are performed. CMSadvanced, on the other hand, performs calculations locally, enabling status information to be utilized directly in system control. For example, to protect components through rapid intervention.



You will find more information on bachmann.info



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