# **WEG MOTOR SCAN**

Your motor powered by intelligence





Motors | Automation | Energy | Transmission & Distribution | Coatings

# HOW DOES IT WORK?

The **WEG Motor Scan®** is the ideal solution for industrial drive fleets monitoring, ensuring excellent operation levels of electric motors and other machines by means of advanced analysis. To enhance the industrial maintenance management, the **WEG Motor Scan®** is complemented by a cloud-based solution for data storage and processing, the **WEG Motion Fleet Management**.

## SMARTER SENSOR WITH MACHINE LEARNING



The **WEG Motor Scan®** collects data such as temperature, three-axis vibration, running time, speed and other relevant motor information. The **WEG Motion Fleet Management** solution automatically provides this data through the Gateway. Then the **WEG Motor Specialist**, module applies Artificial Intelligence and Machine Learning algorithms to perform the advanced data analysis.



Those advanced algorithms follow and learn the operating patterns and deviations of the monitored electric motor, generating failure indicators due to unbalance, misalignment, bearing (advanced failure) and external vibration. Additionally, it is possible to infer the motor load and power consumption.

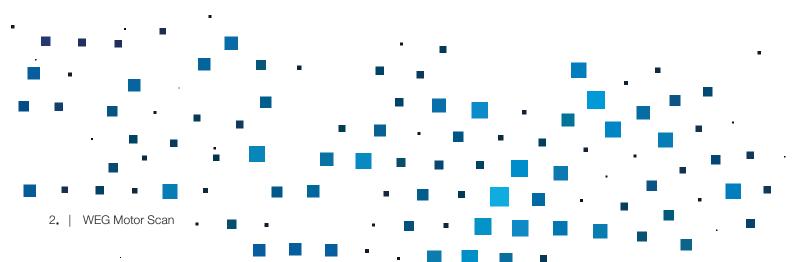
That learning and diagnostics process takes place without human interference, maximizing the delivery of value to the drive fleet maintenance and operation teams.

Artificial Intelligence increasing machine reliability, productivity and availability.

## ARTIFICIAL INTELLIGENCE FOR REAL RESULTS

The solution reduces the verification routes and vibration spectrum studies used to identify the main failures, which cuts down costs and shortens the lead time to analyze the motor condition. With the **WEG Motor Specialist**, module, the diagnostic analysis are done autonomously, allowing the user to a fast and low-cost maintenance action, observing the asset operating condition. From now on, avoid downtime, plan maintenance, optimize power consumption and increase your operational efficiency with the **WEG Motor Specialist**. Your motor powered by intelligence.





AUTOMATIC

COLLECTION

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## FULL MONITORING









MAINTENANCE MANAGEMENT

ALERT

SETTINGS



**BLUETOOTH®** COMMUNICATION



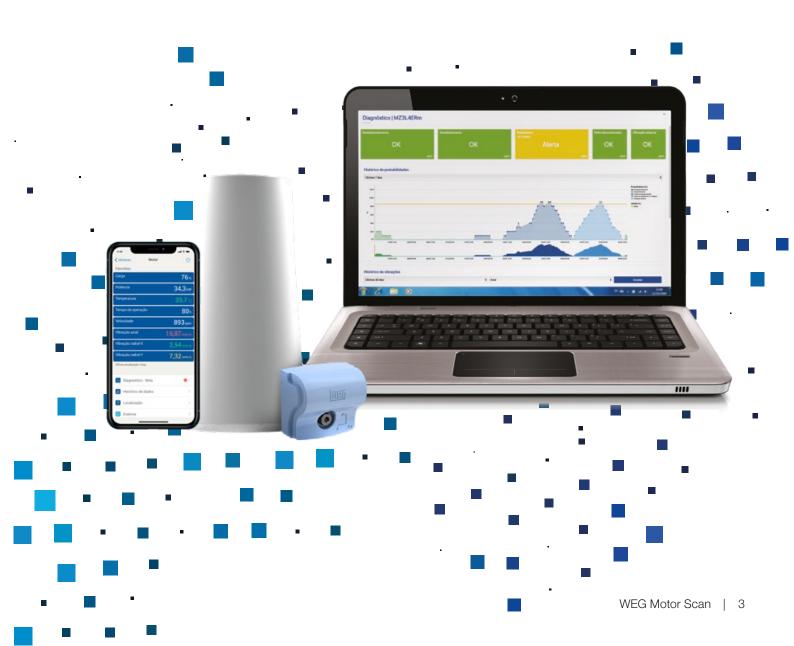


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**TEMPERATURE** 



# STRUCTURE



- Full view of asset operation
- Alert and notification settings
- Maintenance order creation and management
- Fleet reports sent by email
- Asset prioritization tool



#### WEG MOTOR SPECIALIST Artificial Intelligence and Machine Learning for complete diagnostics.



#### WEG EXCHANGE

Data integration with external systems.



#### WEG MOTOR SCAN® EFFICIENT AS ALWAYS. COMPLETE LIKE NEVER BEFORE.

The ever-evolving sensor now comes with the vibration and temperature measurement functionality for electric motor-driven machines, such as compressors, pumps, gearboxes and fans. Another evolution of WEG Motor Scan<sup>®</sup> for the constantly growing industry 4.0.



#### GATEWAY WEG MOTOR SCAN® THE INDUSTRY 4.0 IS NOW EVEN MORE EFFICIENT

The WEG Motor Scan Gateway sends real-time information to the cloud via Wi-Fi, Ethernet cable or 3G/4G, enabling the remote and safe online monitoring of the drive fleet performance. Much more technology and connectivity for an even more efficient Industry 4.0.



#### WEG MOTION FLEET MANAGEMENT ASSET CONDITION MONITORING AND INDUSTRIAL FLEET MANAGEMENT

Developed to simplify and speed up the operation, maintenance and management of industrial plants, the **WEG Motion Fleet Management** is the ideal solution for monitoring and increasing the uptime of your industrial drive fleet. Based on cloud computing technology, the performance of assets can be monitored at any time, from any part of the world.

The **WEG Motion Fleet Management** allows checking the operating status of low and medium voltage motors and drives (VSDs and soft-starters), gearboxes, gearmotors, compressors and other assets installed in any type of industry or facility. Through periodic data collection and advanced data processing, both on the edge and in the cloud, valuable insights are obtained. Thus, it is possible to establish predictive maintenance plans taking into account the operating condition of the fleet (condition-based maintenance).

This approach reduces the unplanned downtime, optimizes repair actions and speeds up the decision-making of the Operations and Maintenance team. The result is increased uptime and reduce the drive fleet TCO (total cost of ownership).



#### WEG MOTOR SPECIALIST YOUR MOTOR POWERED BY INTELLIGENCE

The Specialist module uses Artificial Intelligence algorithms to diagnose incipient mechanical failures. With this tool, the user will receive a notification with early failure diagnostics to carry out the maintenance planning in observing the asset condition. Through data collected with the Motor Scan and stored in the **WEG Motion Fleet Management**, the Specialist module is able to diagnose a misalignment in the motor as the cause of excessive vibration, for example.

To purchase and activate a Specialist subscription, the respective WEG Scan must have an active subscription for the **WEG Motion Fleet Management**.



Users can select the Specialist module(s) according to their requirements:

- WEG Drive Specialist
- WEG Drive Specialist MV
- WEG Motor Specialist
- WEG Motor Specialist LM

## DATA SHEET

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Parameters v	VEG Motion Fleet Management	WEG Motor Specialist
Commonwhead Macanonamanata	• • • • • • • • • • • • • • • • • • • •	••••••
Supported Measurements	•	•
Global vibration in 3 axes (mm/s)		
Vibration spectrum	•	•
Surface temperature (°C)	•	•
Running time (h)	•	•
Power supply frequency (Hz)	•	•
Speed (rpm)	•	•
Load (%) <sup>1) 2)</sup>		•
Power consumption (kWh) <sup>1) 2)</sup>		•
Diagnostic analysis (autonomous)1)		
Imbalance		•
Misalignment		•
Bearings (advanced failure)		•
External vibration		•
Notes: 1) Resource available for direct online drives; in the future it will a 2) Estimated values.	lso be available for variable speed drives.	
Motor Eletric Supply Direct online starter	•	•
Soft-starter	•	
Variable speed drive	•	
Protection Rating		
IP66	•	•
Certifications <sup>1)</sup>		
CE, Anatel, FCC, IC, ICASA, ACMA, NOM, EA		
SIRIM and SUBTEL	•	•
Note: 1) Check out the latest certifications at <u>www.weg.net/wegmotorsc</u>	<u>an</u> .	
Hazardous Area (Inmetro, ATEX, IECEx an	d MASC)	
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## WED MOTOR Specialist

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# YOUR MOTOR POWERED BY

The **WEG Motor Specialist** is a monitoring solution that uses artificial intelligence and machine learning to diagnose, monitor and indicate predictive maintenance in electric motors. This innovative tool transforms WEG's expertise into algorithms, making motor fleet management much more effective. It's artificial intelligence for real results.

PLAN MAINTENANCE | AVOID DOWNTIME | OPTIMIZE CONSUMPTION



# wegdigital

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The constant evolution of the industry demands increasingly smart and integrated solutions. That is why we created the **WEG Digital Solutions.** An efficient set of optimized processes, internet of things (IoT) and data processing. With well-structured Big Data, the objective is to connect manufacturing plants to data generation, using information strategically to generate opportunities, improve productivity and increase assertiveness in decision-making.

This is efficiency. This is Industry 4.0. This is WEG Digital Solutions.



Learn more

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or click here

# **Global presence** is essential, as much as understanding your needs.

#### **Global Presence**

With more than 30,000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

WEG's know-how guarantees the **WEG MOTOR SCAN** is the right choice for your application and business, assuring safety, efficiency and reliability.



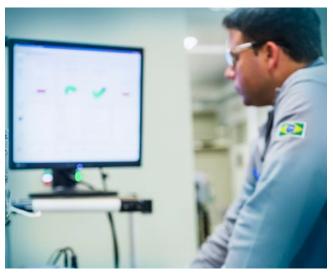
Availability is to have a global support network



Partnership is to create solutions that suit your needs







# **Know More**

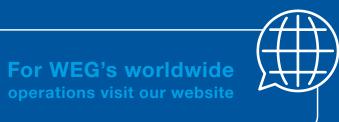
High performance and reliable products to improve your production process.



Excellence is to provide a whole solution in industrial automation that improves our customers productivity.

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