

SKF

POWERFUL ANALYSIS. ANY INDUSTRY.

SKF Microlog Analyzer dBX



Data collection and analysis the way you want it

The SKF Microlog Analyzer dBX has been developed with users in mind. This is why it has a large screen, developed for efficient analysis in the field. This is why it has SKF's most powerful processing power for fast measurements and the ability to perform analyses on the device. This is why it is more user-friendly than ever.

Our largest screen

The SKF Microlog Analyzer dBX has a 10.1-inch high-resolution touch screen. It can display up to 6 measurement windows at once and has been designed for easy viewing in any light condition.

Fast measurements with MPA-in-a-flash

Multi-Point-Automation (MPA) is SKF's fastest vibration analysis method. It is typically 3 times faster than the previous Microlog series, saving you time spent on taking measurements. For even faster data collection, the SKF Microlog Analyzer dBX can take simultaneous tri-axial measurements.

Easy to use

The intuitive user interface makes the SKF Microlog Analyzer dBX easy to learn and use, helping you get started quickly, with minimal training.

Handle with or without gloves

Use the physical backlit keypad or control it via the touchscreen.

For hazardous environments



Designed to meet the needs of a wide range of industries, the SKF Microlog dBX is available for use in both safe and hazardous areas. The SKF Microlog dBX model CMVA 90-EX is approved for use in ATEX, IECEx, Class I Division 2 and Class I Zone 2 rated areas.



Advanced on-device data analysis

Possibility to perform data analyses on the device, without the need to use an external computer. Equipped with SKF gE Enveloping to determine the condition of rolling element bearings.



Large storage memory

256 GB of memory. Enough storage to meet your individual analysis needs.

Designed for field work

Rugged design for reliability in industrial environments. Dust and water-ingress protection to IP65. Onboard camera and RF tag identification to assist in identifying rotating machinery location.

Hours of power

Interchangeable and rechargeable battery supports up to 8 hours of continuous data collection.



Images may differ from product. See technical specifications for details.

Ready for standalone or online work

SKF Microlog Analyzer dBX
with dedicated tools



The Microlog dBX can be used as a standalone tool, taking measurements and analysing data from rotating machinery to determine machine health. It can also be connected to SKF monitoring software, such as the SKF @ptitude software suite, to handle analysis, on-premises and remote data storage, and download predefined measurement routes to the Microlog dBX.

A version for every need

The SKF Microlog Analyzer dBX is available in three versions: the standard version (M), an extended version (F), and a hazardous environment version (EX). The standard version (M) and the hazardous environment version (EX) include all the essential software tools for most data collection and fault-tracing tasks. The extended version (F) builds on this with additional apps, offering enhanced embedded analysis capabilities.

Standard version (M)

- Data Collector
- dBX Analyzer
- Balancing
- gE Enveloping
- Bump Test
- FRF & ODS Analysis

The standard version can be upgraded to an extended version by purchasing an M to F software license.

Extended version (F)

- Data Collector
- dBX Analyzer
- Balancing
- gE Enveloping
- Bump Test
- FRF & ODS Analysis
- RunUp CoastDown
- Order Tracking
- Data Recorder
- Orbit Analysis

Built-in tools



The SKF Microlog Analyzer dBX is equipped with a number of valuable software tools.



Data Collector

Collect data based on defined routes, measurement points and sensor set-up.



Bump Test

Look for structural resonances in machinery and installations (using a hammer).



dBX Analyzer

Collect measurements and perform additional analysis.



FRF & ODS Analysis

Determine structural resonances in machinery and installations using Frequency Response Function analysis.



Balancing

Balance different types of rotating machines with step-by-step guidance.



Order Tracking

Perform (harmonic) order-based vibration analysis suitable for variable speed machinery.



gE Enveloping

Determine the condition of rolling element bearings using SKF analysis algorithms.



Data Recorder

Record long real-time measurements and playback to investigate rotating machinery issues.



RunUp CoastDown

Used to search for dangerous resonances during machine start-up or shut-down.



Orbit Analysis

Visualise rotational behaviour of a rotating shaft. Often used to diagnose faults in machinery with oil-film bearings.

Technical specifications for SKF Microlog Analyzer dBX, CMVA 90 and CMVA 90-EX

Measurements		Physical	
Input channels:	4 analogue input channels with IEPE bias voltage, tachometer channel with built-in power supply for laser tachometer	Dimensions:	300 x 195 x 50 mm (11.8 x 7.7 x 1.97 in)
Data acquisition:	24-bit A/D converter (>90 dB dynamic range)	Weight:	1.9 kg (4.2 lbs), 1.7 kg using single battery
Max. bandwidth:	40 kHz (102.4 kHz sampling rate)	Keypad:	Backlit keys, up, down, right and left, OK, cancel, menu key, right click, cursor toggling, zoom, start/stop measurement key, power on/off
Accuracy:	± 2.5% of full scales range	Connectors:	BNC on 4 input channels, 6-pin Fischer, 7-pin Fischer (Microlog CMXA series compatible). Note BNC nor 7-pin Fischer can be used in hazardous environments.
Measurements parameters:	Acceleration, velocity, displacement, SKF gE bearing condition, phase, voltage, and speed	LCD screen:	10.1 in. multi-point colour touch screen, 1280 x 800 pixels, for indoor and outdoor use
Multi-Point-Automation:	Up to 12 measurements can be listed for (MPA) one button push automated data collection at each measurement location	Audio Playback:	Built-in Bluetooth audio playback support (CMVA 90-EX and CMVA 90-F only)
Environmental		Camera:	built-in, rear facing camera
Operating temperature:	-10 to +50 °C (13 to + 122 °F)	RF tag identification:	Near-field communication (NFC) reader, built-in, located on rear
Storage temperature:	-20 to +60 °C (-4 to + 140 °F)	Storage memory:	256 GB onboard storage (over 128 GB available for measurements)
IP rating:	IP65 dust and water ingress to EN 60529 specification	PC interface:	USB A-type connector
Rugged:	1.2 m (4 ft) drop test to MIL STD 810 specification	Power source	
Approvals:	CE, FCC, KC, RCM	Battery:	2x Lithium-ion polymer rechargeable/ swappable batteries. Working time up to 8 hours.
Hazardous environment approvals: (CMVA 90-EX only)	ATEX II 3G Ex ic IIC T4 Gc IECEx Ex ic IIC T4 Gc. Class I, Division 2, Groups A,B,C,D T4. Class I, Zone 2, AEx ic IIC T4 Gc	Note: batteries can not be swapped in hazardous environments.	

Ordering information

All CMVA 90 kits includes:

- CMVA 90 Microlog dBX, programmed with SKF Data Collector, SKF dBX Analyzer, SKF Balancing, SKF gE Enveloping, SKF Bump Test and SKF FRF & ODS Analysis applications
- CMAC 9206 Two (2) batteries
- CMAC 9001 Universal power supply with 4 power cords
- CMAC 9002 Power adapter cable
- CMAC 9010 USB A-Type to A-Type communications cable
- CMAC 9015 SKF branded carry case
- Certificate of calibration and conformance

Standard kit CMVA 90-M-CK-SL includes:

CMVA 90-M Microlog Analyzer dBX in addition kit includes;

- CMAC 9016 Two (2) hand straps
- CMAC 9017 Neck strap
- CMSS 2200 General purpose accelerometer, cable and magnet mount

Extended kit CMVA 90-F-CK-SL includes:

CMVA 90-F Microlog Analyzer dBX in addition kit includes;

- In addition programmed with SKF Order Tracking, SKF Data Recorder, SKF RunUp CoastDown and SKF Orbit Analysis applications
- CMAC 9016 Two (2) hand straps
- CMAC 9017 Neck strap
- CMSS 2200 General purpose accelerometer, cable and magnet mount

Hazardous environment kit CMVA 90-EX-CK-SL includes:

CMVA 90-EX Microlog Analyzer dBX for hazardous environments in addition kit includes:

- CMAC 9026 Two (2) hand straps for hazardous environments
- CMAC 9027 Neck strap for hazardous environments
- CMSS 787A-IS Hazardous environment rated general purpose accelerometer, cable and magnet mount
- Hazardous environment safety sheet

CMVA 90-M-F-UPGRADE software application license includes:

- Upgrade from standard (M) or hazardous environment (EX) to extended (F) version, software license for SKF Order Tracking, SKF Data Recorder, SKF RunUp CoastDown and SKF Orbit Analysis



Class I, Division 2, Groups A,B,C,D T4
Class I, Zone2, AEx ic IIC T4 Gc



ATEX II 3G Ex ic IIC T4 Gc
IECEx Ex ic IIC T4 Gc

Add the accessories you need

A number of accessories are available to complement the SKF Microlog Analyzer dBX. To allow for maximum application flexibility, the device is not supplied with vibration sensors or cables in the box, but these can be ordered separately.



skf.com/microlog-dbx

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