MMS6410

Epro / Dual-Channel Inductive Displacement Measuring Amplifier

Epro MMS6410 measures displacement from inductive transducers on two independently configurable channels within the MMS 6000 monitoring system.

Product identity and system role

Each channel accepts a suitable half-bridge, full-bridge or differential-transformer arrangement. The monitor can report individual measurements or derive a sum or difference from the two channels, allowing an engineered measurement of relative expansion or paired mechanical movement.

The amplifier supports static displacement and dynamic signals up to the documented signal-frequency limit. The balance of sensor supply to ground helps suppress industrial disturbances. Zero adjustment and zero shift can be set independently of the selected measurement range.

Verified technical characteristics

System family	MMS 6000
Input channels	Two independent inductive-sensor channels
Transducer configurations	Half bridge, full bridge or differential transformer
Signal frequency	Up to 100 Hz
Channel processing	Individual, sum or difference
Local interface	RS-232
System interface	RS-485
Example paired sensor	PR9350 inductive displacement family

Engineering context

Turbine thermal expansion

Process suitable PR9350-family transducer signals to follow casing or shaft expansion during startup and shutdown.

Differential expansion

Calculate the difference between two configured inductive displacement channels where the project uses paired measurement points.

Hydro-machine position

Monitor slow mechanical displacement with a compatible bridge or differential-transformer sensor.

Compressor mechanical movement

Provide displacement values to an MMS 6000 monitoring or diagnosis architecture.

Configuration and verification

Identify both transducers: Record sensor models and the half-bridge, full-bridge or transformer wiring for each channel.

Preserve zero settings: Capture range, zero adjustment and zero-shift configuration before exchanging the card.

Check channel mathematics: Document any sum or difference calculation and its polarity.

Review communications: Confirm RS-232 service access and RS-485 host addressing in the installed rack.

Selected engineering questions

How should bridge wiring be verified before replacing MMS6410?
Record the transducer type and terminal assignment for each channel, then compare the selected bridge mode with the restored configuration.

What can cause a zero shift on MMS6410 after service?
Sensor mounting, bridge balance, wiring polarity and stored zero parameters all affect the baseline; compare each with the pre-service record.

When is sum or difference processing useful on MMS6410?
Use it when two validated displacement channels represent a paired mechanical quantity, with channel polarity and scaling verified.

How is RS-485 communication on MMS6410 restored?
Preserve the rack address and host mapping, then confirm that both channel values and status are visible at the diagnosis system.

Can an arbitrary inductive sensor be connected to MMS6410?
Only after its bridge arrangement, excitation and scaling are checked against the approved project configuration.

What is the best functional test for MMS6410?
Use a known mechanical displacement or calibrated transducer stimulus and compare both channel readings and derived value.

Source and application boundary

EPRO MMS 6410 Dual Channel Measuring Amplifier for Inductive Displacement Sensors, manufacturer-original data sheet.

Manufacturer-original MMS6410 data describe the base module. Confirm fitted revision and project configuration against the supplied unit.

Related product references

Separate product listings for project review; confirm each order code and system fit independently.

EPRO PR6423/010-010	EPRO PR6423/10R-010
EPRO PR6424/010-010	EPRO PR6424/006-010

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Send the complete model and installed-system details when requesting a quotation.