VTX-MOD configuration guide

Triaxial vibration and surface temperature for digital plant networks

Document status - application guide and configuration review checklist. Use a controlled configuration datasheet, approved drawing and written quotation to define the delivered model, ratings, documents and commercial terms.

Choose RS485 or IO-Link

- VTX-MOD - RS485 Modbus RTU request for a multidrop plant network.

- VTX-MOD-IOL - IO-Link request connected point-to-point to an IO-Link master port.

Define X/Y/Z axes, velocity RMS, acceleration features, displacement peak-to-peak and surface temperature as separate required channels. List the units, passband and update rate needed for each feature.

RS485 network design inputs

Provide node count, cable type and length, baud rate, parity, device addresses, topology, isolation and supply design. Termination and bias belong to the complete network plan. Confirm node loading with the selected transceivers and master.

Request a controlled register map that identifies register address, zero/one-based convention, function code, data type, byte/word order, scaling, unit, validity flags and update period. Example address ranges require a model release before use in PLC code.

IO-Link integration inputs

Specify master model, port class, cable length and power budget. Obtain the correct IODD and process-data layout for the exact device revision. Confirm engineering units and diagnostic status handling in the PLC project.

VTX-MOD configuration guide (continued)

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Material, installation and evidence

Request the housing material and protection level for the actual washdown, corrosion and temperature exposure. Confirm 316L material evidence, sealing test scope and the approved connector / cable combination where required.

Mount on a rigid bearing housing or qualified pad. Record the sensor axis arrows relative to axial, horizontal-radial and vertical-radial directions. Define the temperature contact location and thermal coupling.

Original-system migration checklist

- Confirm original axis count and protocol. A one-axis or two-axis source has a different feature map from a triaxial request.
- List every PLC tag that must be retained, together with unit, scaling, refresh time, fault state and alarm logic.
- Validate a pilot node against the existing machine baseline before copying the network configuration across the plant.

Quotation inputs and returned documents

Supply exact quantity, machine list, operating speeds, mounting threads, cable plan, destination, and required temperature / vibration features. Request configuration datasheet, controlled register map or IODD, envelope drawing, available calibration scope and wiring drawing.

Request the exact quantity, destination, installation schedule and required documents. Confirm unit prices, installation-kit prices, calibration scope, transport, warranty and lead time in the quotation for the selected configuration.

Machine evaluation and engineering reference

Select the applicable ISO 20816 part and adopted edition for the machine, support, speed, measurement direction and operating state. Overall housing vibration and changes from a baseline support condition trending. A diagnostic bearing assessment may need high-frequency features or waveforms.

https://www.iso.org/standard/89922.html