



Enhancing Torque Measurement with the HIMMELSTEIN 700+ SERIES SIGNAL CONDITIONERS



Achieving high-fidelity torque measurement is essential across industries—from R&D to industrial testing environments. While torque transducers capture raw mechanical data, the integrity and usability of that data depend heavily on precise signal conditioning. The Model 700+ Series by delivers exceptional signal processing, filtering, data handling, and real-time control capabilities to optimize the performance of torque transducers.

Core Technical Benefits:

- Noise Suppression & Data Integrity:** The combination of analog and digital filtering ensures only valid measurements pass through, enhancing data reliability in environments prone to electrical or mechanical disturbances.
- Real-Time Monitoring & Remote Visibility:** Operators can monitor critical torque and speed parameters remotely which is especially valuable in high-temperature or hazardous environments. The high-resolution display ensures precise readings even from a distance.
- Fast Alarm Response & Automated Control:** Programmable limit checking (up to 2,600 times per second) enables near-instantaneous detection of abnormal conditions, with logic outputs capable of initiating shutdowns or alerts without external system delays.
- Flexible System Integration:** Support for diverse sensor types (torque, displacement, encoder, voltage/current) and rich I/O options make the Model 700+ highly adaptable in multi-sensor test environments.
- High-Precision Data Handling:** With high sampling and processing rates, plus high display resolution, the Model 700+ ensures precise capture of dynamic torque events and accurate display for validation against system readouts.
- Quality Assurance & Compliance:** The 700 Series, including the 700+, complies with EMC and Low-Voltage Directives and holds CE Mark certification.



Sample Application Scenarios

- **Remote Torque Monitoring in Extreme Environments:** Ideal for test setups where proximity is restricted by temperature or safety concerns. The Model 700+ enables control-room monitoring with preserved accuracy and immediate feedback.
- **Multi-Device Signal Management:** In setups with multiple torque transducers or sensors, the conditioner standardizes outputs, minimizes miscommunication, and helps protect against interference—a common customer advantage.
- **Automated Protection via Logic I/O:** The built-in limit checking and I/O logic can autonomously initiate shutdown sequences or alarms, reducing dependence on slower external processing systems and improving safety.
- **Cross-System Validation:** When comparing speed or torque readouts across systems, the 700+'s precise display and sampling ensure trustworthy benchmarks, supporting calibration and verification processes.



In conclusion, The Himmelstein Model 700+ Series Signal Conditioners offer an exceptional blend of precision, flexibility, and real-time control. By incorporating high-resolution displays, fast sampling, adjustable sensor compatibility, robust filtering, and compliance with regulatory standards, the 700+ elevates measurement integrity and system responsiveness making it an essential asset for any torque-critical application.

S. Himmelstein and Company

Designing and Making the World's Best Torque Instruments since 1960

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