POWER MEASUREMENT 3720-ACM

Technical Reference

01 Instrument identity and measurement role

Power Measurement 3720-ACM is a 3720 ACM digital power instrument for electrical measurements, demand monitoring and power-quality analysis.

Engineering domain	3720 ACM capability
Measurement	Voltage, current, real/reactive/apparent power, frequency and power factor
Accounting	Energy registers and demand quantities
Power quality	Harmonic analysis and waveform capture or recording
Supervision	High-speed and standard setpoint functions

Installed-system boundary

3720 ACM platform capabilities are documented; supply, communications and voltage-input options require the actual rear-label and fitted-card identification.

Source identity

Power Measurement 3720 ACM Installation and Operation Manual, MRP 70000-0004

02 Measurement and data architecture

Layer	Function	Engineering check
Circuit inputs	Voltage and current signals enter the selected wiring configuration.	Confirm terminal assignment and safe transformer practice.
Scaling	CT/PT ratios map the measured circuit to display values.	Record both ratios and voltage wiring mode.
Derived values	Power, factor, frequency, energy and demand are calculated.	Compare displayed values with the known circuit.
Power-quality record	Harmonics and waveform records describe configured events.	Check firmware and recording settings.
Setpoint layer	Configured thresholds drive monitoring responses.	Review threshold, delay and assigned output.

System relationship

The 3720 ACM platform measures electrical quantities and records energy and demand for industrial power-monitoring applications. Voltage and current scaling must reflect the installed CT/PT arrangement.

03 Supply and communications option map

Configuration	Documented range or function	Identification
Basic supply	100-240 V AC or 110-300 V DC	Rear-panel label
P24/48 supply	20-60 V DC	Only when the option is fitted
Serial communication	Card-dependent serial interfaces	Inspect installed ISOCOM or MPCC card
Ethernet communication	MPE card option	Inspect fitted hardware before assuming Ethernet

Selection rule

The bare 3720-ACM reference identifies the instrument family. Supply and communication choices follow the rear label, fitted card and firmware.

Meter hardware list

Basic supply design	100-240 V AC or 110-300 V DC; verify rear label
Optional supply design	P24/48: 20-60 V DC; only when fitted
Communication options	Optional cards include serial and Ethernet interfaces; inspect installed card

04 Configuration and diagnostic logic

Task	Technical setting	Verification
Wiring model	Select the installed voltage/current arrangement.	Compare readings with circuit state.
Scaling	Enter CT/PT ratios in front-panel programming.	Check voltage, current and power signs.
Demand	Set the intended demand period and register handling.	Compare trend with process load.
Setpoints	Configure threshold, delay and response.	Exercise each required alarm condition.
Communications	Set only the protocol and ports of the fitted card.	Confirm external data exchange.
Power quality	Enable supported harmonic/waveform records.	Check that expected events are captured.

05 Engineering decisions and references

Question	Evidence-led answer
Can Ethernet be assumed?	No. It depends on an installed MPE option.
Which supply range applies?	Use the actual rear-panel basic or P24/48 label.
What controls measured scale?	The CT/PT ratios and selected wiring mode.
How are readings accepted?	Compare values, demand and alarms with known conditions.

Technical reference

Power Measurement 3720 ACM Installation and Operation Manual, MRP 70000-0004

Related catalog references

Portfolio navigation only. Verify every proposed configuration separately.

General Electric UR8MH

Siemens 6ES7331-7KF02-0AB0

Honeywell TC-IAH161

Discuss the complete reference

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