GE IC697HSC700

High-Speed Counter

GE IC697HSC700 processes rapid pulse inputs independently of the PLC scan and controls four isolated positive-logic outputs for Series 90-70 applications.

01	02	03	04
200 kHz counting for Types A–D	800 kHz Type E A-quad-B operation	12 single-ended or differential inputs	Four optically isolated positive-logic outputs

System position

Encoder or pulse source	IC697HSC700 local counter engine	Preset and output logic	Four field outputs plus PLC result data

Evidence boundary

Only verified exact-model facts and explicitly identified family context are included. Similar codes are not treated as substitutes.

Model-specific release focus

- 200 kHz counting for Types A–D
- 800 kHz Type E A-quad-B operation
- 12 single-ended or differential inputs
- Four optically isolated positive-logic outputs

02 / CAPABILITY MAP

Engineering domains and architecture

Module voltage	5 VDC from backplane
Input count	12
Counter types	Five selectable types
Maximum rate	200 kHz; 800 kHz for Type E A-quad-B

Input thresholds	TTL, 10–30 V non-TTL, 400 mV magnetic pickup
Output count	4 positive-logic outputs
Output supply	5 VDC or 10–30 VDC user supply
Terminal connector	40-position removable strip

Interface architecture

Inputs 1–12

Single-ended or differential pulse and control signals

Inputs 1–4

Also support magnetic-pickup thresholds

OSC / 5VP

External oscillator and built-in 5 V encoder supply connections

OUT1–OUT4

Optically isolated source outputs with shared fuse protection

Interface evidence for acceptance

- Inputs 1–12: Single-ended or differential pulse and control signals
- Inputs 1–4: Also support magnetic-pickup thresholds
- OSC / 5VP: External oscillator and built-in 5 V encoder supply connections
- OUT1–OUT4: Optically isolated source outputs with shared fuse protection

Use cases with controlled scope

Turbine flow measurement	Velocity measurement	Material handling	Motion and process control
Counts high-rate pulses independently of the PLC program scan.	Derives speed from encoder or proximity-pulse inputs.	Tracks parts, position and cut-length events with local presets.	Uses four hardware outputs for low-latency counter actions.

INTEGRATION CHECKPOINTS

Identity	Host system	Configuration	Acceptance
GE IC697HSC700 is preserved in full.	Rack, slot and surrounding hardware are verified.	Project, firmware and settings are recorded.	Functional evidence is captured before release.

System relationship

Encoder or pulse source	IC697HSC700 local counter engine	Preset and output logic	Four field outputs plus PLC result data

Configuration-control record

- Input thresholds: TTL, 10–30 V non-TTL, 400 mV magnetic pickup
- Output count: 4 positive-logic outputs
- Output supply: 5 VDC or 10–30 VDC user supply
- Terminal connector: 40-position removable strip

Decision matrix

Question	Answer
What is the maximum count rate of GE IC697HSC700?	Types A–D and Type E up/down operate to 200 kHz; Type E A-quad-B operation supports up to 800 kHz.
How many field inputs are available on GE IC697HSC700?	The module provides twelve inputs that can be wired single-ended or differentially.
Which GE IC697HSC700 inputs accept magnetic pickups?	Magnetic-pickup thresholds are available on inputs 1 through 4.
What input voltage classes does GE IC697HSC700 support?	It supports 5 V TTL, 10–30 V non-TTL and 400 mV magnetic-pickup inputs.

Eight release precautions

1 Power down the rack and every field source before inserting or removing IC697HSC700.	**2** Select TTL, non-TTL or magnetic-pickup thresholds to match the actual sensor circuit.	**3** Use shielded input cable and observe the documented 30 m maximum length.	**4** Connect magnetic pickups only to inputs 1 through 4.
5 Include encoder current and energized-output current in the backplane-load calculation.	**6** Protect the output supply and replace the common 5 A fuse only with the specified type.	**7** Do not exceed 30 VDC or 1 A per output when using the 10–30 VDC output supply.	**8** After configuration, verify count direction, scaling, reset/gate inputs, preset actions and all four output states.

Product verification and support

Apter Power verification record

Model identity	Keep the complete GE model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power references	Scope note
GE IC697ACC724	Portfolio reference only; verify compatibility independently.
GE IC697CPM790	Portfolio reference only; verify compatibility independently.
GE IC697ALG321	Portfolio reference only; verify compatibility independently.

	Apter Power technical and sourcing support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com Scan for the Apter Power contact page.	Model record GE IC697HSC700 High-Speed Counter Verify the complete nameplate before installation.