

INDUSTRIAL AUTOMATION PRODUCT

3008

Main Processor Module

Triconex 3008 is a main processor module for Tricon v9.6 and later systems. Three modules execute and vote the control program while coordinating I/O, communication, diagnostics, and event timing.

IDENTITY	VERIFIED VALUE
Manufacturer	Triconex
System family	Tricon v9.6 and later controller
Part number	3008
Country	USA
HS code	8537101190

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



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Technical Specifications

Technical values below are limited to the named Triconex product record.

PARAMETER	TECHNICAL VALUE
Processor	Motorola MPC860; 32 bit; 50 MHz
Main memory	16 MB DRAM; non-battery-backed
Retentive memory	32 KB SRAM; battery-backed
Program storage	6 MB Flash PROM
TriBus rate	25 Mbit/s
TriBus protection	32-bit CRC
TriBus transfer	32-bit DMA; fully isolated
I/O bus processor	Motorola MPC860; 32 bit; 50 MHz
Communication bus processor	Motorola MPC860; 32 bit; 50 MHz
Processors per main chassis	3
Supported system	Tricon v9.6 and later
Indicators	PASS; FAULT; ACTIVE; MAINT1; MAINT2; COM TX/RX; I/O TX/RX

ENGINEERING DATA SUMMARY

DATA GROUP	VERIFIED ASSIGNMENT
Installed host / carrier	Tricon main chassis
Companion hardware	two additional 3008 main processors
Field connection	triplicated I/O bus
Primary system function	Executes the user-written control program independently in one of three processor channels
Controlled acceptance duty	Emergency shutdown logic execution

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System Role and Architecture

Triconex 3008 is a main processor module for Tricon v9.6 and later systems. Three modules execute and vote the control program while coordinating I/O, communication, diagnostics, and event timing.

FUNCTION 1

Executes the user-written control program independently in one of three processor channels

FUNCTION 2

Communicates with the triplicated I/O subsystem and exchanges data across TriBus

FUNCTION 3

Votes input information and preserves controller operation during diagnosed channel faults

FUNCTION 4

Time-stamps designated sequence-of-events variable transitions

Matched system components

- Tricon main chassis
- two additional 3008 main processors
- triplicated I/O bus
- TriStation application and SOE configuration

SYSTEM INTEGRATION RECORD

INTEGRATION ITEM	DOCUMENTED ROLE
Installed host / carrier	Tricon main chassis
Companion hardware	two additional 3008 main processors
Field connection	triplicated I/O bus
Primary system function	Executes the user-written control program independently in one of three processor channels
Controlled acceptance duty	Emergency shutdown logic execution

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Applications and Engineering Context

Emergency shutdown logic execution

Executes the user-written control program independently in one of three processor channels

Burner-management sequence control

Communicates with the triplicated I/O subsystem and exchanges data across TriBus

Triplicated process-safety controller processing

Votes input information and preserves controller operation during diagnosed channel faults

Sequence-of-events recording and diagnostics

Time-stamps designated sequence-of-events variable transitions

TECHNICAL NOTE

Maintain three matched 3008 processors in the main chassis, preserve the approved TriStation application and SOE blocks, and verify TriBus, I/O-bus, memory, and channel diagnostics after service.

MODEL-SPECIFIC ACCEPTANCE EVIDENCE

CHECK	ACCEPTANCE CONDITION
Identity	3008 / 3008 recorded
Physical interface	Tricon main chassis
Companion check	two additional 3008 main processors
Functional proof	Executes the user-written control program independently in one of three processor channels
Application test	Emergency shutdown logic execution

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Engineering Precautions

- 1
- Verify 3008 and the Tricon v9.6-or-later controller revision before replacement.
- 2
- Place the safety application and controlled process in the approved maintenance state.
- 3
- Record processor position, active state, maintenance indicators, and application revision.
- 4
- Use ESD controls and inspect the keyed main-chassis connector before insertion.
- 5
- Do not mix processor types or transfer memory specifications from another MP generation.

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
Triconex 3504E	High-Density Digital Input Module	Open product page
Triconex 4210	Remote Extender Module Set	Open product page
Triconex 4119A	Enhanced Intelligent Communication Module	Open product page

MANUFACTURER SOURCE RECORD

Tricon Systems Technical Product Guide
9791007-013

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