

AMIKON TECHNICAL INTELLIGENCE

Product Data Sheet

Triconex 3007

Main Processor Module

3006 and 3007 Specifications	
This table lists the specifications for the 3006 and 3007 Main Processors, which can be used with Tricon v9.0 - v9.51.x.	
Table 1 - 3006 and 3007 Main Processor Specifications	
Feature	Specification
Central processor	National NS32GX32, 32-bit, 25 MHz
Math co-processor	National NS32381, 32-bit, 25 MHz
EPROM capacity	512 KB
SRAM	1 MB
Clock/calendar	Battery-backed time and date
Clock drift	+/-2 seconds/day typical; +/-8.6 seconds/day maximum
TriBus	4 Mbps; 16-bit DMA
Diagnostic serial port	Optically isolated RS-232, 25-pin connector
Serial-port isolation	500 VDC
Communication protocol	Modbus RTU
Communication interface	RS-485
Power supply	24 VDC, 1 A
Weight	1.5 kg (3.3 lbs)
Dimensions	114 mm (4.5 in) x 114 mm (4.5 in) x 114 mm (4.5 in)
Part number	9720077-012
Part name	Triconex 3007 Main Processor Module

Please refer to the datasheet for the 3006 and 3007 Main Processors.

CPU

25 MHz

SRAM

1 MB

TRIBUS

4 Mbps

SOURCE

9720077-012

Triconex 3007 is a Main Processor Module listed for Tricon v9.0-v9.5.x and v9.51.x systems. It uses a 25 MHz National NS32GX32 central processor, an NS32381 math co-processor and 1 MB of SRAM.

01

VERIFIED PRODUCT PARAMETERS

Compatible controller versions	Tricon v9.0-v9.5.x and v9.51.x
Central processor	National NS32GX32, 32-bit, 25 MHz
Math co-processor	National NS32381, 32-bit, 25 MHz
EPROM capacity	512 KB
SRAM capacity	1 MB
Clock/calendar	Battery-backed time and date
Clock drift	+/-2 seconds/day typical; +/-8.6 seconds/day maximum
TriBus rate and transfer	4 Mbps; 16-bit DMA
Diagnostic serial port	Optically isolated RS-232, 25-pin connector
Serial-port isolation	500 VDC

02 ADDITIONAL TECHNICAL DATA

Communication processor	Intel 80C152, 16 MHz
Communication processor memory	32 KB EPROM; 64K shared-memory interface
Communication bus interface	RS-485 at 2 Mbps
I/O processor and interface	Intel 80C31, 12 MHz; RS-485 at 375 kbps
Logic power	15 W

03 SYSTEM ROLE AND APPLICATIONS

Three Main Processors independently execute the control program and compare information through TriBus. Preserve the exact controller generation and memory requirement; the shared 3006/3007 specification assigns different SRAM capacities to the two models.

- Each Main Processor independently communicates with its I/O subsystem and executes the control program. Maintain the documented three-processor controller arrangement and approved application configuration.
- Use configured sequence-of-events blocks to record designated Boolean state changes with timestamps. Retrieve event data through the documented communication arrangement and SOE software.
- Use the dedicated optically isolated serial interface for Diagread diagnostic analysis. Do not present this connector as an unrestricted network or field-device interface.

04 OFFICIAL INSTALLATION FACTS

- Confirm the exact 3007 identity and controller-version compatibility.
- For an online process, verify at least one Main Processor has a blinking yellow Active indicator.
- Remove only the faulty processor using its retractable fasteners.
- Seat the replacement firmly and tighten fasteners to 10 inch-pounds.

05 OFFICIAL DOCUMENTATION

Invensys 9700077-012, February 2009

AMIKON PRODUCT SUPPORT

Amikon Limited | INFO@AMIKON.CN