

PCM5: Process Control Module 5



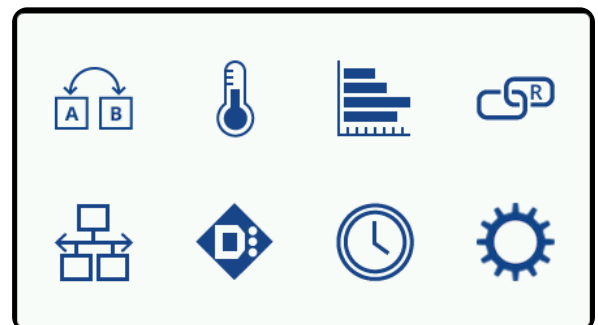
The NovaTech D/3® Process Control Module 5, PCM5, represents a leap forward in the development, virtualization, and cybersecurity capabilities of the D/3 PCM family.

The PCM5 runs a customized embedded Linux operating system, providing a secure platform for delivering continuous improvements to the D/3 system. The intuitive LCD touch panel with text messages and engineering units makes it easy to monitor the state of the PCM5.

The 2U rack mounted PCM5 is built for the industrial environment with a 0°C to +50°C operating range and no moving parts. It also has redundant hot-swappable load sharing power supplies which can be powered from separate sources so it can keep running when you experience power problems in your plant. The PCM5 can be made fully redundant with the addition of a second PCM5, a 1U rack mounted PCM5 Redundancy Module, and Ethernet cables. This makes it easy to upgrade the D/3 while controlling your processes and improves your control system's MTBF.

Key Features

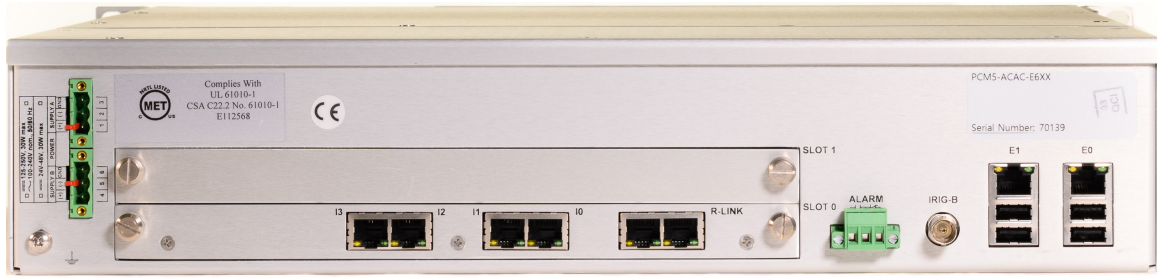
- Quad core processor - all D/3 related applications benefit from the four cores
- 64-bit CPU architecture
- Non-volatile memory
- Load sharing hot-swappable power supplies
- No moving parts
- LCD touch panel
- Redundant PCM5 can be physically separated from the Primary PCM



Redundant LCD Panel

Software Features

- Larger SABL® programs – up to 256Kb when compiled
- Virtual PCM5 for application development and testing
- Futureproof – platform for adding future apps, enhancements, and expanded capability
- Lean, custom Linux Open Embedded OS
- PCM5 software developed with modern programming tools facilitates development of new features
- Built in cybersecurity
 - o Firewall configured from WinCOD data and enabled by default
 - o Trusted Platform Module and Secure Boot hardware capable
- Improved diagnostics, including plain-English, software-based diagnostics, alarming, and troubleshooting



Rear View of PCM5 Showing Power and Ethernet Connections

Specifications

Redundant Power Supplies

Standard. Hot swappable; load-sharing; can be separate (diverse - AC, DC, or mix) power sources; single supply is capable of operating the unit.

Universal AC/DC Input

85-264V ac at 50-60Hz [nominal ranges: 110/120/220/230/240 V ac] or 125-250V dc

Isolation

2kV

Compliance

IEC 61010-1-201 and IEC 61326 standards

Physical

2U Rack Mount, 17W x 3.5H x 13.5D (in), plus rear-cable clearance, 10lbs

CPU Speed

Quad Core, each @ 1.91Ghz

Architecture

64-bit

Volatile Memory

2GB

Non-volatile Memory

8GB

Operating Temperature

0 - 50°C

Front Side Bus Speed-CPU to RAM

1333MHz

MTBF

100,000 hours

1 Gbit/Sec Ethernet Ports

4 I/O, 1 Redundancy Module, 1 Rlink, E0, E1

Local Diagnostics

LCD Touchscreen, text with engineering units

Cybersecurity Built-in

Firewall Built-in; Trusted Platform and Secure Boot Hardware

Supported I/O Protocols

8000I/O
Modbus/TCP
EtherNet/IP Class 3
DF1 Over Ethernet (SLC and PLC5)
Anybus and AS-Interface Gateways

Larger SABL® Programs

256Kb Compiled Program Size

Bumpless Failover with Redundant PCMs

Yes

Operating System

Linux Open Embedded Kernel