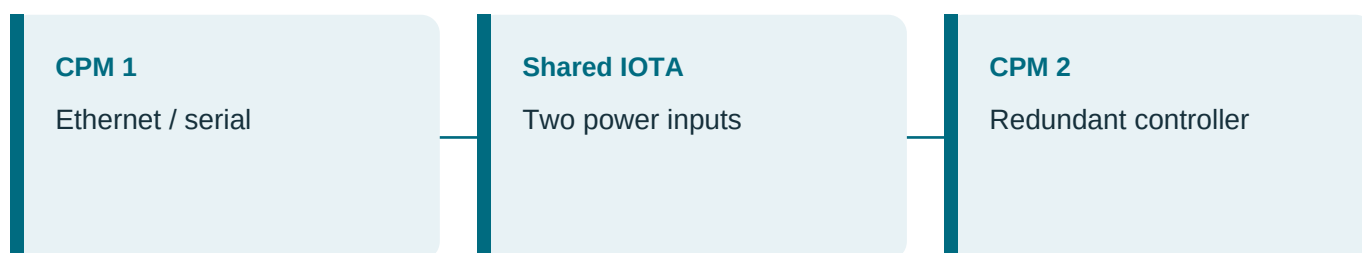


SC-UCNN11 51307573-176

Redundant ControlEdge RTU controller

Honeywell SC-UCNN11 is the redundant ControlEdge RTU controller assembly with two control processor modules and one IOTA. It provides networked control and acquisition through connected expansion I/O.



- Paired control processor architecture
- Independent Ethernet network configuration
- Battery-free nonvolatile data retention
- CPU watchdog with status-LED fault indication

SYSTEM POSITION

SC-UCNN11 uses expansion I/O rather than the mixed onboard I/O fitted to the nonredundant controller. Its two CPMs and shared IOTA form the redundant controller assembly, with serial and Ethernet interfaces for the configured RTU and SCADA links.

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Controller assembly	2 CPMs and 1 IOTA; redundant configuration
Onboard mixed I/O	Not included; use expansion I/O
Processor	Dual-core 32-bit ARM Cortex-A9, 667 MHz
RAM / flash	512 MB / 256 MB
Nonvolatile memory	16 Mbits; 20+ years data life, no battery
Power-input ports	2
Rated input	24 Vdc +/-25%; 18-30 Vdc
Maximum ripple	120 mVpp
Maximum input current	1.30 A at 30 Vdc; redundant controllers plus 9 IOMs
Ethernet	4 ports across 2 CPMs; 10/100BaseTx

INTEGRATION RECORD

Plan the I/O rows, separate network subnets and both power-input paths against the approved remote-station design. Preserve processor configuration and time synchronization, reserve instrument power separately, and verify the end-plate ring before testing communications and the required controller functions. Metering applications also need the appropriate per-run licenses and configured acceptance checks.

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Network segmentation	Same or different subnets
Serial interfaces	2 RS232 and 2 RS485
Execution / RTC	Cycle ≥ 20 ms; RTC resolution 1 ms
Time synchronization	SNTP or DNP3
Expansion capacity	30 IOMs; 5 rows; maximum 9 IOMs per row
EFM meter runs	Maximum 12; SP-MRUN01 required per run
Power, minimum	5.76 W at 24 Vdc; no serial, only Ethernet 1 active
Power, no expansion	6.72 W at 24 Vdc; 4 serial ports and Ethernet 1-4 active
Power, expansion	6.96 W at 24 Vdc; 4 serial and Ethernet 1-5 active; excludes IOMs/instruments

ENGINEERING NOTE

SC-UCNN11 includes 2 CPMs and 1 IOTA; the redundant hardware summary does not include onboard mixed I/O. The controller has 512 MB RAM, 256 MB flash and 16 Mbits nonvolatile memory. Power-sizing scenarios exclude connected instruments and expansion IOM loads.

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What hardware is supplied as the SC-UCNN11 controller assembly?

The ordering table specifies two control processor modules (CPMs) and one IOTA as a complete redundant controller.

Does SC-UCNN11 contain the 28 mixed onboard I/O points?

No. The redundant-controller hardware summary shows no onboard mixed I/O. Use the documented expansion I/O arrangement for field channels.

How much nonvolatile storage is available without a battery?

The redundant controller has 16 Mbits of nonvolatile memory, with a specified data life of more than 20 years and no battery requirement.

Can its Ethernet connections be placed on different subnets?

Yes. The four ports across the two CPMs may be on the same or different subnets; each uses auto-detecting 10/100BaseTx.

How many power-supply ports are provided?

The redundant controller provides two power-supply ports. The specified input range is 18-30 Vdc with a maximum ripple of 120 mVpp.

What are the cycle and time-synchronization limits?

The execution cycle is 20 ms or longer. The real-time clock resolves 1 ms, and synchronization is supported through SNTP or DNP3.

How are additional expansion rows connected?

Dedicated left/right end plates and CAT-5 straight or crossover cables complete the expansion ring. Cable length is limited to 100 m; the controller supports up to five rows.

What is required for twelve electronic flow-meter runs?

The redundant controller supports up to twelve meter runs, with one SP-MRUN01 license required for each run per RTU.

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MANUFACTURER SOURCE

Honeywell ControlEdge RTU Specification Sheet, SC03-300-174, Version 1.0, December 2022, pp. 6-17, 23-25, 29

Related Honeywell catalog pages

Browse related automation products. These links do not establish interchangeability.

Honeywell SC-UCMX02 51307195-276

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Honeywell 900B16-0202

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Honeywell 900H03-0102

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RELEASE BOUNDARY

Verify the complete SC-UCNN11 assembly, both CPMs, IOTA and approved redundancy configuration before restoring service.

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