



SNC-2051 SUBNET-RELAY NODE CONTROLLER

MOBILE, SECURE AND RELIABLE

Extending communications beyond the horizon

Our STANAG 4691/MARLIN-compliant SNC-2051 platform is able to form tactical IP networks dynamically, while also self-configuring as needed in response to changing topologies. The SNC-2051 supports the use of standard TCP/UDP-IP traffic, allowing a seamless integration of tactical to strategic or commercial networks.

By enabling wireless HF/VHF/UHF users to adaptively form ad hoc networks, where and when they are critical for mission success, the Collins Aerospace SNC-2051 SubNet-Relay Node Controller has the flexibility you're looking for.

TCP throughput

The SNC-2051 contains our IP Traffic Manager (IPTM), which is a Transmission Control Protocol (TCP) Performance Enhancing Proxy (PEP), that dramatically improves TCP throughput in a high-latency, high-error wireless environment. Our embedded IPTM keeps traffic from timing out and dropping connections across wireless media.

Ease of integration

What's more, the SNC-2051 can be integrated with RF bearers from HF and WBHF through to UHF, offering complete flexibility in system design. Featuring common industry standard hardware interfaces, SNC-2051 is an easy replacement for the SNC-2050 in your current architecture. Let us help you choose the right software option for compatibility with the SNC-2050 software which is operationally fielded across allied nations.

When mobile networking is critical, you can rely on the Collins SNC-2051 for flexible, secure and reliable connections when it matters the most.



KEY FEATURES & BENEFITS

- True mobile, ad-hoc, HF/VHF/UHF networking
- Easy-to-use and self-organizing
- Load/save multiple user configurations
- Built-in data compression to improve throughput
- Dynamic slot merging
- Dynamically allocated channel bandwidth
- Optimized use of both intelligent relay and routing
- Adaptable to use with many modem/radio combinations
- STANAG 4691/MARLIN-compliant

ADDITIONAL FEATURES

- Uses standard TCP/IP and UDP/IP
- Compliant with MARLIN STANAG 4691
- Versions backward compatible with deployed SNC versions also available
- Distributed TDMA network for mobile nodes
- Dynamic slot and relay node allocation
- Operates at data rates from 3.2 kbps (HF) to 1.92 Mbps (V/UHF)
- Improves TCP throughput between 200% to 400% over standard
- Up to 70 kbps TCP throughput, uncompressed, in a standard 25 kHz channel with Collins 96 kbps high speed modem (HSM-2051)
- Standard synchronous and ethernet interfaces

SPECIFICATIONS

Functional interfaces

Data	Ethernet, or synchronous serial (from 3200 bps to 1.92 Mbps)
Control	Locally with control LCD and keypad or embedded graphical user interface (GUI) with mouse and monitor (not included)
	Remotely via Windows Application over IP

Physical interfaces

Ethernet	Dual 10/100/1000 Mbps RJ45
Serial	Single 44-pin synchronous (DTE): RS-232, RS-422 and RS-530 (custom interface cables required)
	9-pin asynchronous RS-232 COM port interface

Time Source NTP via Ethernet, or GPS (NMEA) via 9-pin COM port

Video SVGA and HDMI output for embedded GUI

Keyboard/mouse USB-A

Environmental

Operating temperature 0° C to 50° C

Storage temperature -40° C to 70° C

Relative humidity 0 to 95%, non-condensing

Altitude 1,000 ft below sea level to 15,000 ft above sea level

Shock MIL-STD-810H, Method 516.8, Section 4.6.2 Functional shock, Procedure I

Vibration MIL-STD-810H, Method 528.1, Section 5.1.2.4 Discrete Frequency Test

Compliance CE, CA and FCC (Class A, Part 15 compliant)
MIL-STD 461G compliant (CE101, CE102, CS101, CS114, CS115, CS118, RE101, RS103, RE102)
Note: CS116 compliant with external Collins Aerospace custom dongle

Power 100-240V AC, 50/60 Hz, 0.9A

Size 8.75" W x 1.75" H x 17.25" D
1U aluminum half rack-mount chassis (mounting kits available for both dual and single unit mount)

Weight Approximately 7 lbs.

Specifications subject to change without notice.



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