

Wireless Network Access Point (NAP) Model 7031



Features

- Wireless Sensor Network to Ethernet Bridge
- 32Mb Static Data Buffer to Operate off Network for Extended Periods
- 100/10bT Ethernet with DHCP, Boot P, or Fixed IP
- Operates in the License Free 902-928 MHz ISM Band
- Encrypted Secure Transmissions
- Networks Thousands of Wireless Sensors
- Permits Overlapping Coverage with Other Access Points
- Solid State, No Moving Parts
- Universal Input Power Supply



Description

The solid-state 7031 Network Access point (NAP) bridges the gap between wireless sensors and a standard Ethernet network. Thousands of sensors may share the same 914 MHz wireless network hosted by one or more 7031 NAP's. For landline Ethernet communication with other 7031 NAP's and desktop PCs the unit features a full 16-bit Ethernet chipset that is Novel NE2000 compatible. As an Ethernet node the unit features typical 100/10 base-T Ethernet, TCP, FTP and Telnet accessibility. For ease of installation, the IP addresses can be handled through a DHCP server, a Boot P server, or fixed with configuration software. NAP installation is quick, requiring only a power source and a standard snap-in (RJ-45) Ethernet connector to get started. Operators can monitor wireless sensor data, be informed of alarm conditions, and configure parameters all from the convenience of standard PCs.

For easy network address configuration, the 7031 is remotely accessible over computer networks or directly. Over the network, configuration is available through easy to use Techkor software. Operators may also configure or monitor the unit locally by connecting a standard VGA monitor and keyboard.

The 7031 is an extremely reliable wireless device. Handshaking, packet framing, collision avoidance, packet encoding, and error checking are all performed automatically. For maximum confidence, the 7031 performs periodic self-test diagnosis of power fluctuations, low battery, or harmful internal temperatures. Should operating parameters be exceeded, the unit will either alert the operator wirelessly or self-initiate a system reset.

Applications

- Condition Based Maintenance • Sensor Monitoring • Machine Diagnostics •

Performance – All Models: $T_C=25^\circ\text{C}$ unless otherwise specified.

Parameter	Min.	Typ	Max	Units
Transceiver Operational Frequency		914.50		MHz
Radiated Power (ERP)			0	dBm
Receiver Sensitivity		-100		dBm
Range		250		feet
Wireless Data Rate			65	kb/s
CPU Clock Frequency		400		MHz
Real Time Clock Life		10		Years
Memory, DRAM		16		Mbyte
Memory, SRAM		32		Mbyte
Sensors Supported	1		1024	sensors
Ethernet Bit Rate		100		Mbit/s
Operating Current ¹		100		mA
Weight		900		Grams
Antenna Pod Cable Length		25	100	feet
AC Input Voltage	100		240	VAC
AC Input Frequency	47		63	Hz
Operating Temperature	0		55	$^\circ\text{C}$
Storage Temperature	-40		85	$^\circ\text{C}$
Operating Humidity, non-condensing	5		95	%

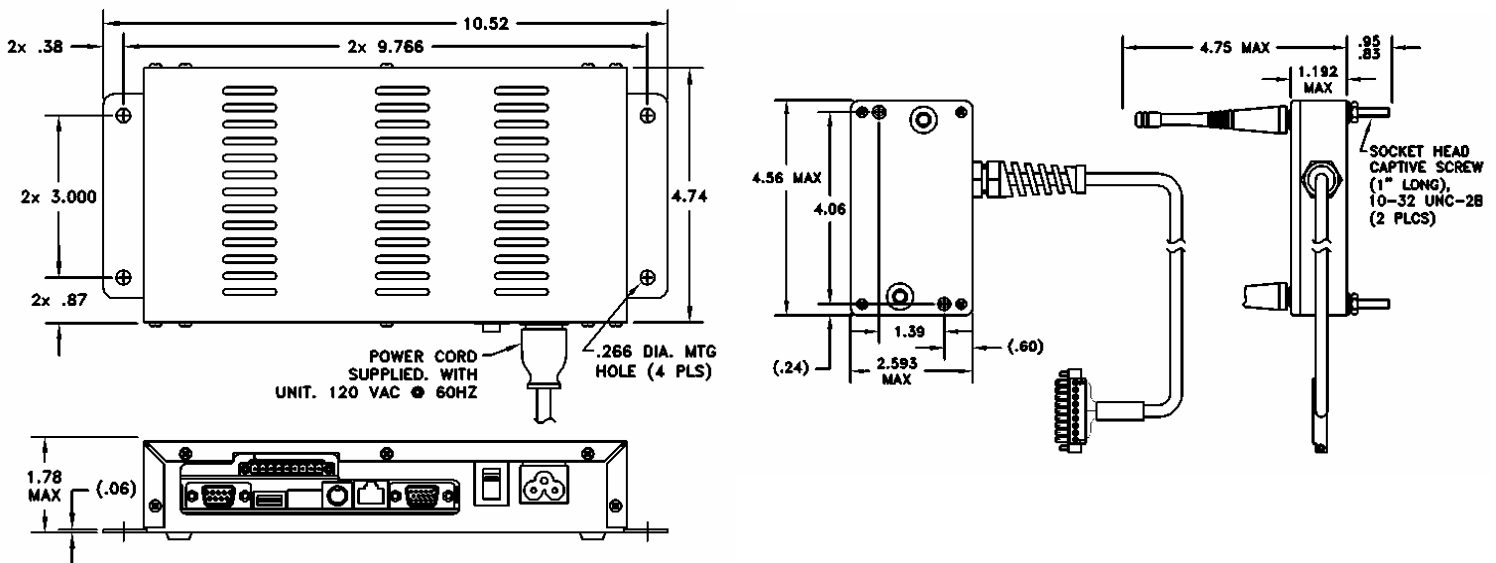
Note 1: The power source must be capable of providing at least 3 times the operating current at turn-on.

Ordering Information

Part Number:

7031000-1 Wireless NAP with 25' cable for IP-66 radio pod, 32Mb data storage

7031000-2 Wireless NAP with 100' cable for IP-66 radio pod, 32Mb data storage



Rev A.1, Specifications subject to change without notice.