



NARADA BASE

USB POWERED WIRELESS BASE STATION

OVERVIEW

The Narada Base station is a versatile wireless data acquisition hub built around the Atmel ATmega128 microcontroller. Designed for use with both the Narada and Formic wireless platforms, the Narada Base station connects to the PC through an available USB port and can facilitate data collection, real-time control, and network maintenance tasks. This versatile hub also incorporates 8 multi-purpose LEDs for user interaction and 128kB of supplemental SRAM for temporary data storage.

The Narada Base station comes preprogrammed for use with the Civionics System Center PC software, but it is fully programmable to support application-specific user development. An extensive software development kit is also available for purchase with the Narada Base hardware. This kit contains tools to help create intelligent software solutions for a variety of application spaces.

By leveraging the versatile TI CC2420 wireless radio for IEEE 802.15.4 communications and a high-gain radio for extended range, the Narada Base station is capable of reliable data transmission in large networks and at distances of up to 600m.

GENERAL INFORMATION	
Dimensions	3.0" x 2.0" x 1.5"
Base Station to PC Interfaces	RS-232, USB

CPU	
Processor	Atmel ATmega128
FLASH	128 kB
EEPROM	4 kB
SRAM	4 kB
External SRAM	128 kB
External Clock Speed	8 MHz

RADIO	
Transceiver	TI CC2420
Frequency Band	2.4000 - 2.4835 GHz
Data Rate	250 kb/s
Range (line of sight)	600m

Narada hardware design licensed from the University of Michigan

