

# SNMP-1000-B

## Intelligent SNMP/HTTP System Manager



### Features

- Monitors system fans, temperature, voltage, power supply, CPU fan, CPU temperature, Vcore, watchdog timer, etc.
- Stand alone system monitoring: no driver needed, OS-independent
- Remote alarm notification through SNMP/HTTP, e-mail or pager
- Easy status monitoring through Ethernet using a browser
- Highly reliable: functions even when system or power fails
- Modular design eases system integration and customization

### Introduction

The SNMP-1000-B is a platform independent system management module that can detect system operating conditions and notify users to take necessary action to avert system failure through multiple communication protocols. With the SNMP-1000-B installed, a system monitoring and management can be integrated into an existing SNMP-based network management environment. The SNMP-1000-B also has a built-in web-based administration interface which allows users to monitor the system operation from any place with Internet connectivity. The SNMP-1000-B adds another dimension of reliability to your most critical applications.

#### Powerful yet Easy to Use

The SNMP-1000-B can detect a wide variety of internal system conditions, including temperature, voltage, fan rotation, power supply or CPU operations such as watchdog timer output. Through its I2C interface it can even monitor CPU temperature and voltages of Advantech's full-sized CPU cards. Depending on the alarm severity or user setup, it can generate several different alarm outputs, including SNMP trap, e-mail, pager, acoustic signal, system reset and digital output. Through the easy-to-use web-based user interface, users can set the alarm criteria and select alarm outputs for each sensor input independently to meet user requirements. The backup battery enables the SNMP-1000-B to perform its alarm function even during total system power failure.

#### Web-enabled, No Driver Needed

The onboard 10/100 Mbps Fast Ethernet interface enables the SNMP-1000-B to be connected to your existing network, independent from the system's connection. It supports multiple network protocols such as TCP/IP, SNMP, HTTP and Telnet, allowing you to manage your systems simply by using a web browser. No special software driver is needed thus eliminating compatibility issues with different operating systems.

#### Online Upgrade and Batch Setup

You can upgrade the firmware online by using the included setup utility. There is no need to go to a remote site and disassemble the chassis to collect each SNMP-1000-B module or card for firmware upgrade. The setup utility also supports "batch setup" function, which allows you to save a configuration and duplicate it to many other SNMP-1000-B modules and cards. This function saves tremendous time and effort when you have a number of SNMP-1000-B units installed in your environment.

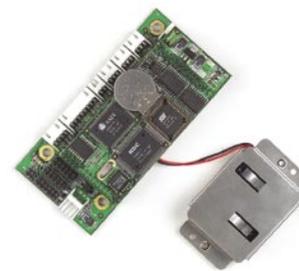
#### Flexible Modular Hardware Design

The modular design of the SNMP-1000-B allows it to be easily customized to fit into any system. The ultra compact module is only 41 mm wide and 94 mm long. It can be mounted on standard or customized carrier boards to plug into any standard PCI/ISA slot.

### Optional



SNMP-1000-E1B1E



SNMP-1000-E2B1E

## Firmware Specifications

System Status Monitoring and Management	Real-time healthy status monitoring: Provides real-time status display in HTTP/Java graphical format History log up to 600 records. Data can be downloaded through network or sent by e-mail Alarm event record display
Alarm Notification	E-mail: Can set up to 4 addresses to receive e-mails SNMP trap: Notify up to 8 SNMP administrators Pager notification: Dial out through external modem to send messages to up to 8 pagers Audible alarm sound
Supported Protocols	TCP, UDP, IP, ICMP, DHCP, BOOTP, ARP, SNMP, HTTP, Telnet
Management Function	Web-based remote configure, control and monitor Remote reset, power down and power up Remote digital output signal control Remote message display control Firmware upgrade from serial port and Ethernet port Modem dial in (console mode only)

## Sensor Specifications

Voltage	Input	+5 V <sub>DC</sub> , -5 V <sub>DC</sub> , +5 V <sub>SB</sub> , +3.3 V <sub>DC</sub> , +12 V <sub>DC</sub> , -12 V <sub>DC</sub>
Temperature	Input	9 (one for on-board sensor, eight for external sensors)
	Sensor	LM75
	Interface	I <sup>2</sup> C
Fan Speed	Range	-30 ~ 125° C (-22 ~ 257° F)
	Input	9 (7 for SNMP-1000-E2B1E)
Power Good	Range	700 ~ 10000 rpm
	Input	4 (1 for SNMP-1000-E2B1E)
CPU Card Healthy	Range	High > 2.4 V <sub>DC</sub> , Low < 0.8 V <sub>DC</sub>
	Interface	I <sup>2</sup> C
	Input	CPU Vcore, CPU fan, CPU temperature (up to 2 CPUs), +5 V <sub>DC</sub> , -5 V <sub>DC</sub> , V <sub>IO</sub> , +12 V <sub>DC</sub> , -12 V <sub>DC</sub>
Digital Input/Output	Compatibility	PCA-6002-B, 6003, 6004, 6186, 6187, 6188, 6189, 6190 AIMB-740, 742, 744, 750, 760, 762, 560, 554
	Input	8 (SNMP-1000-E1B1E only)
Output	Output	4 (3 for SNMP-1000-E2B1E)

## System Specifications

Processor System	CPU	80188 compatible	
Environment	Firmware	512 KB Embedded Flash ROM	
	Memory	512 KB SRAM	
Ethernet	Interface	10/100Base-T	
Serial Port	Interface	RS-232	
	Baud Rate	9600 bps	
Miscellaneous	Buzzer Support	Yes	
	Detect Time-out Signal of System	Yes	
	Watchdog Timer	Yes	
Battery	Charge Time	3 hr	
	Battery Type	Li-Ion	
	Capacity	1800 mAh (full charged, for 45 ~ 50 minutes operation, depending on system configuration)	
	Battery Life	1 year @ 20° C, 80% capacity after 500 cycles of charge and discharge	
Power Requirement	Typical	5 V @ 550 mA	
	Operating	Non-Operating	
	Temperature	0 ~ 60° C (-32 ~ 140° F)	-20 ~ 70° C (4 ~ 158° F)
	Humidity	-	5 ~ 95% RH, non-condensing
Physical Characteristics	Dimensions	Kernel module: 40.5 x 93 mm (1.59" x 3.66") Carrier board: 55 x 115 mm (2.17" x 4.53") PCI/ISA I/O extension module: 175 x 107 mm (6.89" x 4.21")	

## Ordering Information

Part Number	Description
SNMP-1000-E1B1E	SNMP/HTTP system manager development kit, including the kernel module mounted on a PCI/ISA carrier board, 3 sets of temperature sensors, and cables
SNMP-1000-E2B1E	SNMP/HTTP system manager card for ACP series chassis, including the kernel module * Compatible with Advantech chassis series: IPC-622, IPC-623, IPC-7143, IPC-7220 and all ACP series chassis (except ACP-1000P2/X2)