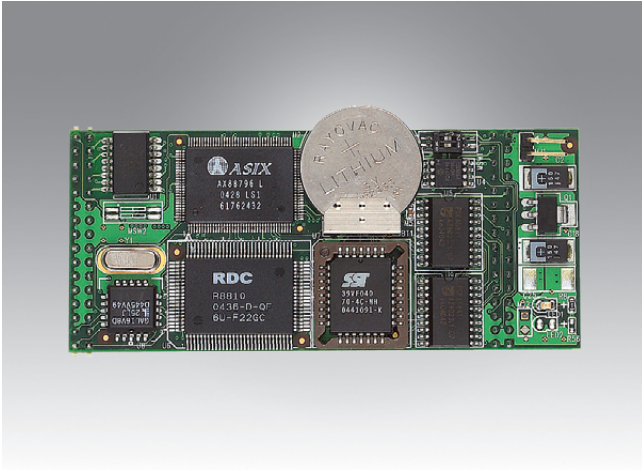


# SNMP-1000-B

## Intelligent SNMP/HTTP System Manager



### Features

- Monitoring system fans, temperature, voltage, power supply, CPU fan, CPU temperature, Vcore, watchdog timer, etc.
- Standalone 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: function will keep working even if the 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, 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 system operation from any place with Internet connectivity. The SNMP-1000-B adds another dimension of reliability to your most critical applications.

#### Powerful, 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 traps, e-mails, paging, acoustic signals, system resets, 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.

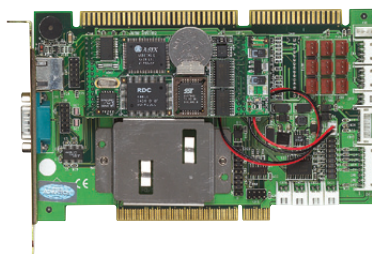
#### Online Upgrade and Batch Setup

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.

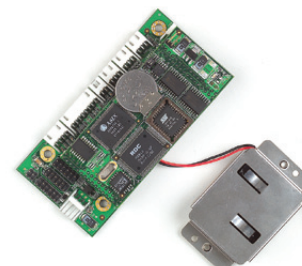
#### Flexible Modular Hardware Design

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 (1.61" x 3.70"). 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 health status monitoring: Provides real-time status display in HTTP/Java graphical format<br>History log up to 600 records. Data can be downloaded through network or sent by e-mail<br>Display alarm event records                                  |
| Alarm Notification                      | E-mail: Can set up to 4 addresses to receive e-mails<br>SNMP trap: Notify up to 8 SNMP administrators<br>Pager notification: Dial out through external modem to send messages to up to 8 pagers<br>Audible alarm sound                                         |
| Supported Protocols                     | TCP, UDP, IP, ICMP, DHCP, BOOTP, ARP, SNMP, HTTP, Telnet                                                                                                                                                                                                       |
| Management Function                     | Web-based remote configure, control and monitor<br>Remote reset, power down and power up<br>Remote digital output signal control<br>Remote message display control<br>Firmware upgrade from serial port and Ethernet port<br>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, 8 for external sensors)                                                                                           |
|                      | Sensor        | LM75                                                                                                                                          |
|                      | Interface     | I2C                                                                                                                                           |
|                      | Range         | -30 ~ 125° C (-22 ~ 257° F)                                                                                                                   |
| Fan Speed            | Input         | 9 (7 for SNMP-1000-E2B1E)                                                                                                                     |
|                      | Range         | 700 ~ 10000 rpm                                                                                                                               |
| Power                | Input         | 4 (1 for SNMP-1000-E2B1E)                                                                                                                     |
|                      | Range         | High > 2.4 V <sub>DC</sub> , Low < 0.8 V <sub>DC</sub>                                                                                        |
| CPU Card Health      | Interface     | I2C                                                                                                                                           |
|                      | Input         | CPU Vcore, CPU fan, CPU temperature (up to 2 CPUs), +5 V <sub>DC</sub> , -5 V <sub>DC</sub> , VI/O, +12 V <sub>DC</sub> , -12 V <sub>DC</sub> |
|                      | Compatibility | PCA-6186, 6187, 6008, 6010, 6011, 6012                                                                                                        |
|                      |               | PCE-5120, 5124, 5125, 5126<br>AIMB-742                                                                                                        |
| Digital Input/Output | Input         | 8 (SNMP-1000-E1B1E only)                                                                                                                      |
|                      | 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                        | 10/100 Mbps                                                                                 |
| 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 (fully charged gives 45 ~ 50 minutes operation, depending on system configuration) |
|                          | Battery Life                     | 1 year @ 20° C, 80% capacity after 500 cycles of charge and discharge                       |
| Power Requirements       | 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                                                            |
|                          | Dimensions                       | Kernel module: 40.5 x 93 mm (1.59" x 3.66")                                                 |
| Physical Characteristics |                                  | 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<br>* Compatible with Advantech chassis series: IPC-622, IPC-623, IPC-7143, IPC-7220 and all ACP series chassis (except ACP-1010BP with limited condition) |