

AP-SNC10000

Smart Sensor Network Controller

High-performance Medium Scale Sensor Network Controller Solution



AddPac

AddPac Technology

2015, Sales and Marketing

Contents

- Product Overview
- Hardware Specification
- Software Service
- Network Service and Features
- IoT Service and Features
- Ordering Information

Product Overview

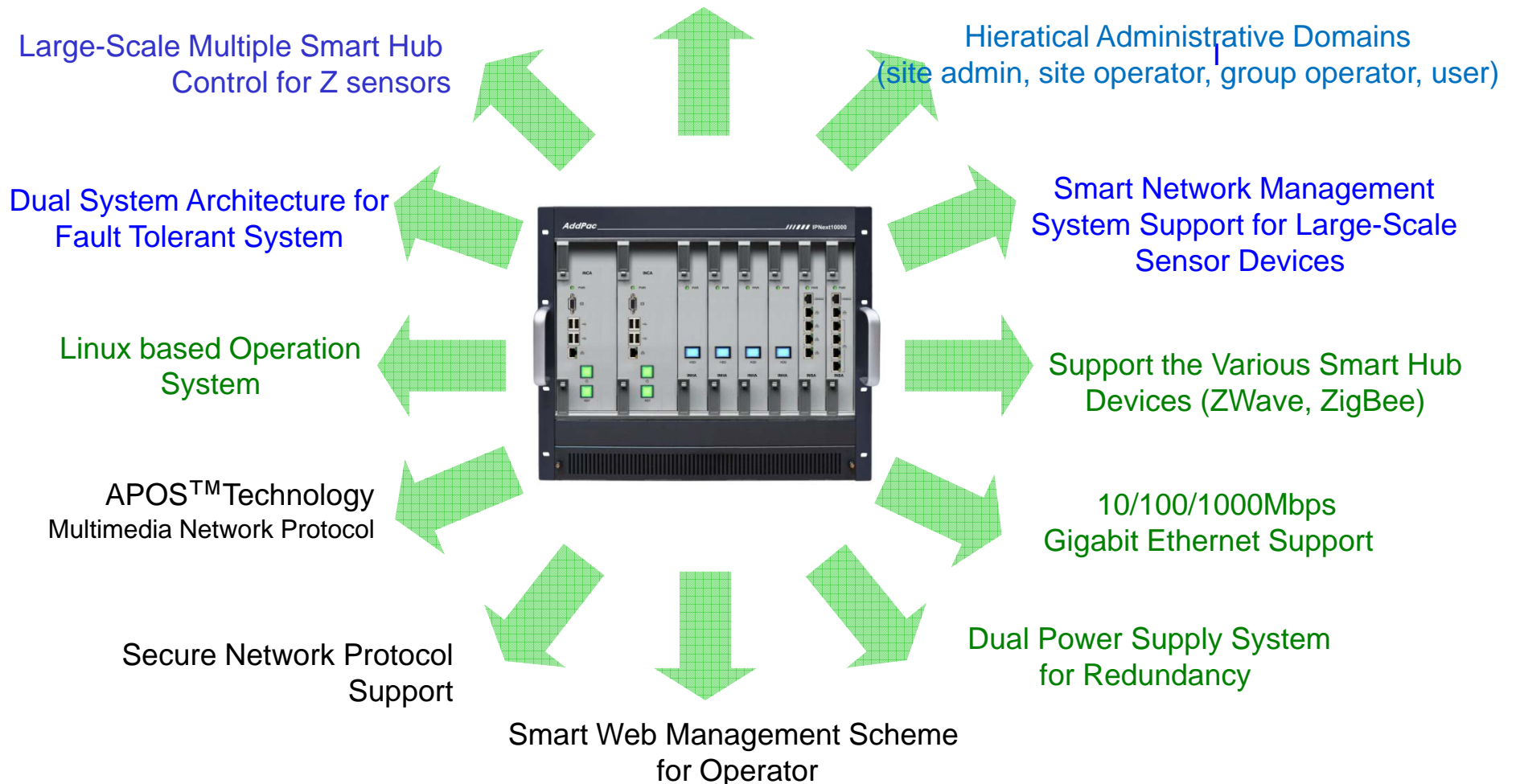
AP-SNC10000 Smart Sensor Network Controller

- Large-Scale Sensor Network Control Service
- Support Large-Scale Smart Hub Devices for Zigbee/Zwave sensors
- One(1) System Dual Sensor Network Controller Architecture
 - One(1) Gigabit Ethernet Interface, Two(2) Hard Disk / a CPU Board
 - Default : Single Smart Sensor Network Controller
 - Option A : Dual Smart Sensor Network Controller
 - Option B : One(1) Smart Sensor Network Controller
+ One(1) Smart Sensor Network Manager
- Fault Tolerant and Scalability Architecture
- Powerful Management and User Friendly Features
- Firmware Upgradeable Architecture
- Linux Operation System
- Dual Redundancy Power Module

Product Highlights

AP-SNC10000 Smart Sensor Network Controller

Centralized Sensor Network Controller Solution



Hardware Specification

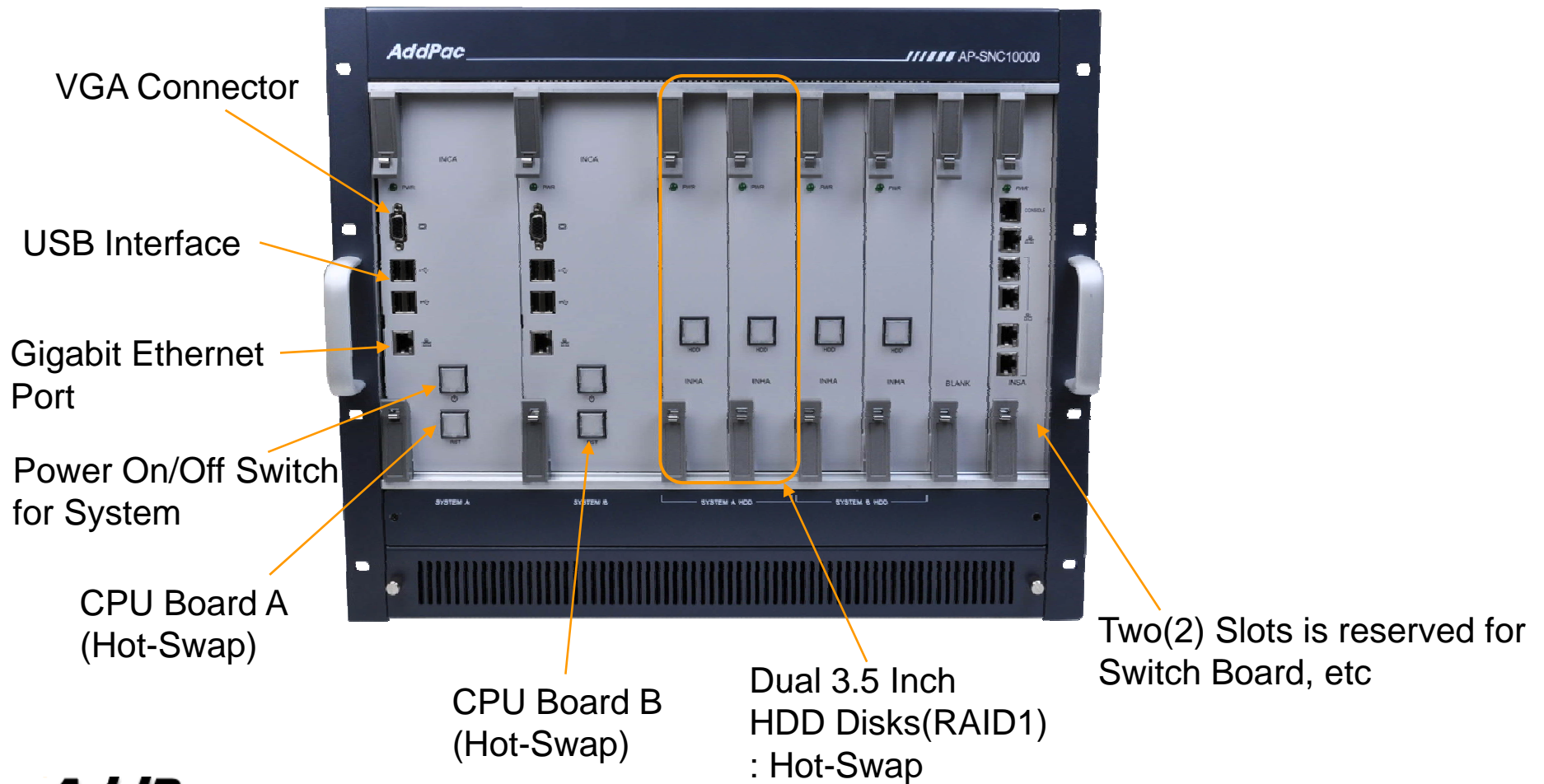
AP-SNC10000 Smart Sensor Network Controller

- High-End Computing Power
- Main Chassis
 - Dual Redundancy CPU Boards for System Fault Tolerant
 - One(1) 10/100/1000Mbps Gigabit Ethernet
 - Four(4) USB Interface Port
 - VGA Interface Port for External Video Monitor
 - Two(2) 3.5 Inch Hard Disk Interface Slot (RAID 1)
 - Dual Redundancy Power Supply Module
 - Hot-Swap Features
 - Right most two(2) slots is reserved for Switch Board,, etc

Hardware Specification

AP-SNC10000 Smart Sensor Network Controller

AP-SNC10000 Front Side



Hardware Specification

AP-SNC10000 Smart Sensor Network Controller

AP-SNC10000 Back Side



FANs for Air Cooling

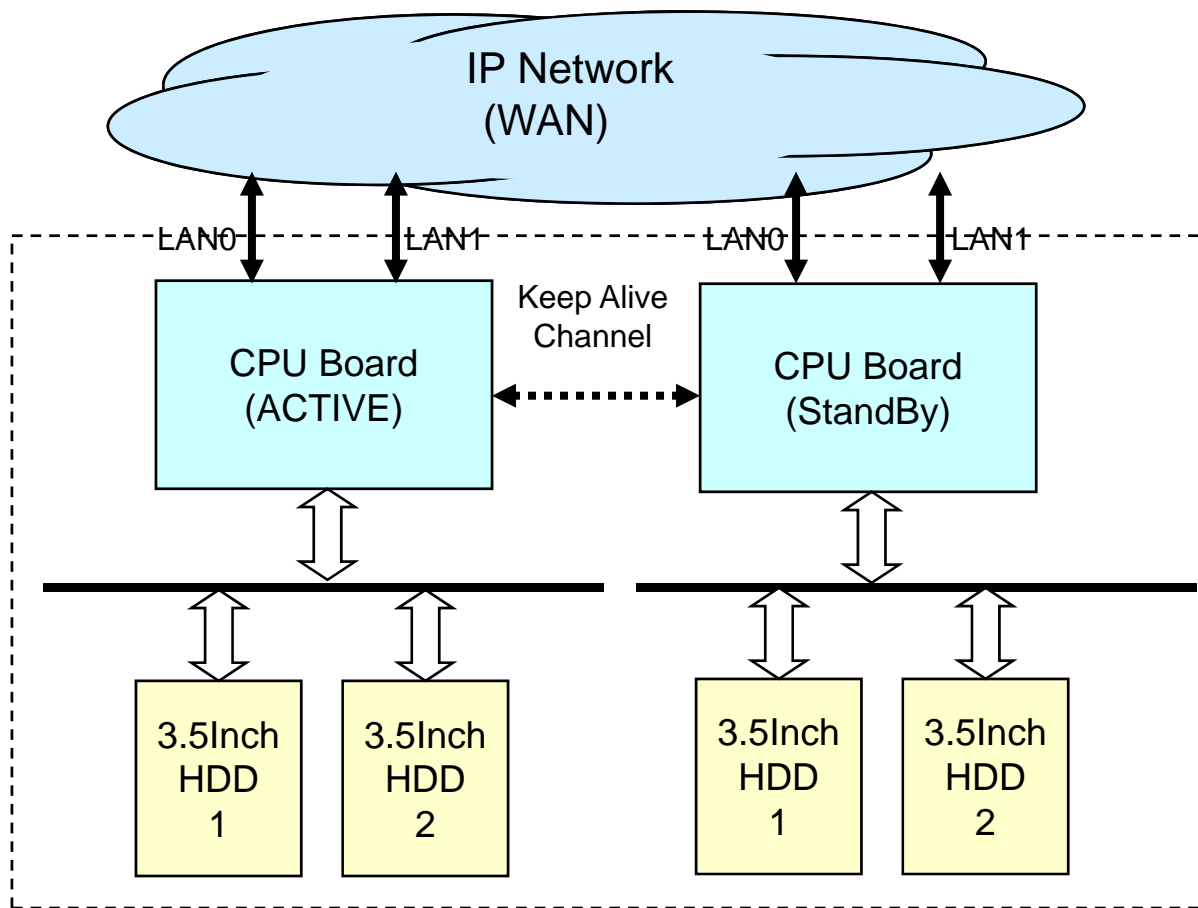
Dual Power Supply
for System A

Dual Power Supply
for System B

System Redundancy Features

AP-SNC10000 Smart Sensor Network Controller

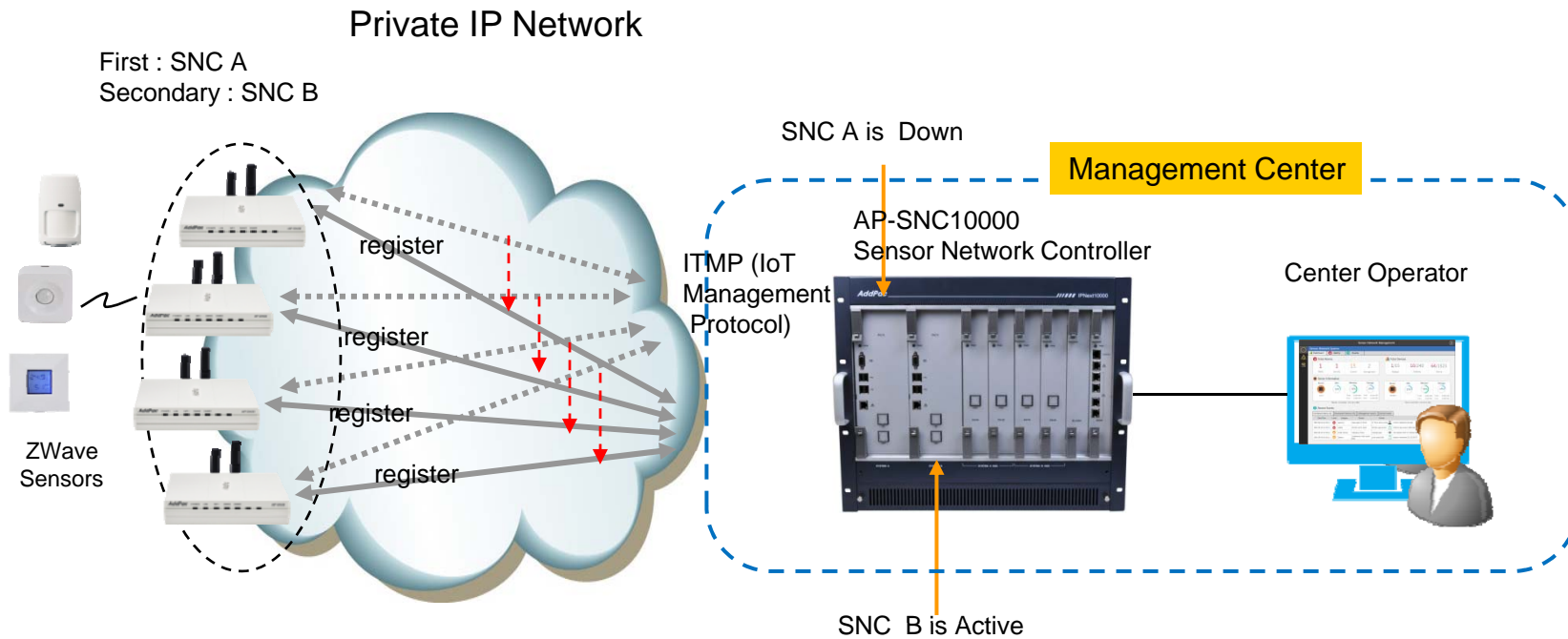
AP-SNC3000 System Block Diagram



System Redundancy Features

AP-SNC10000 Smart Sensor Network Controller

- Active– Active Duplication Scheme
- Active – Standby Duplication Scheme
- VRRP based Duplication Scheme

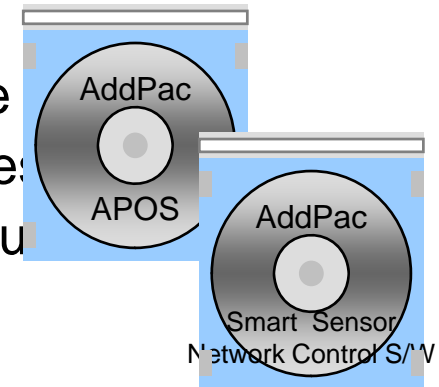


Active – Standby Duplication Scheme (example)

Software Service

AP-SNC10000 Smart Sensor Network Controller

- Built-in AddPac APOS Internetworking Software
 - Scalability, Functionality, and Stability Features
- Firmware Upgradeable RISC Computing Architecture
- Industry Standard IP based Network Protocol Features
- Sensor Network Control Service for Multiple Smart Hubs
- Smart Web Management



Network Service and Features

AP-SNC10000 Smart Sensor Network Controller

- Network Managements
 - Standard SNMP Agent (MIB v2) Support
 - Remote Management using Console, Telnet
 - Web based Management using HTTP Server Interface
- Security Functions
 - Standard & Extended IP Access List
 - Enable/Disable for Specific Network Protocols
 - Multi-level User Account Management
 - Auto-disconnect for Telnet/Console Sessions
 - PPP User Authentication Supports (PAP & CHAP)
- Operation & Managements
 - System Performance Analysis for Process, CPU, Connection Interface
 - Debugging, System Auditing, and Diagnostics Support
 - System Booting and Auto-rebooting with Watchdog Feature
 - System Managements with Data Logging
 - IP Traffic Statistics with Accounting

Network Service and Features

AP-SNC10000 Smart Sensor Network Controller

- Other Scalability Features
 - DHCP Server & Relay Functions
 - Network Address Translation (NAT) Function
 - Port Address Translation (PAT) Function
 - Transparent Bridging (IEEE Standard) Function
 - Spanning Tree Bridging Protocol Support
 - Remote Bridging Support
 - Concurrent Routing and Bridging Support
 - Cisco Style Command Line Interface (CLI)
 - Network time Protocol (NTP) Support



IoT Service and Features

Key Concepts for Enterprise IoT Solution

AP-SNC10000 Smart Sensor Network Controller

- **Enterprise Requirements**

- The things in enterprise are controlled on much more complex environment and configurations than home.
- Network conditions and management requirements are also much more various than home.

- **Our Solution**

- We do support flexible configuration of Smart IoT Controllers and Managers to meet various enterprise requirements.
- We do support several type of Smart IoT Controllers and Managers to meet various enterprise environments.
- We do support flexible management authority and access control for center/site operators and users.

Hierarchical Administrative Domains

AP-SNC10000 Smart Sensor Network Controller

- **Super Administrator**
 - He can manage multiple sites and site operators.
- **Site Operator**
 - A site is logically independent administrative domain which can be a building or a set of offices and buildings.
 - A site operator can manage his site and group operators of it.
- **Group Operator**
 - A site is composed by multiple sections that are build up by hierarchical groups.
 - A group operator can view and control the sections that are belong to the group.
- **User**
 - An user can view and control his section.

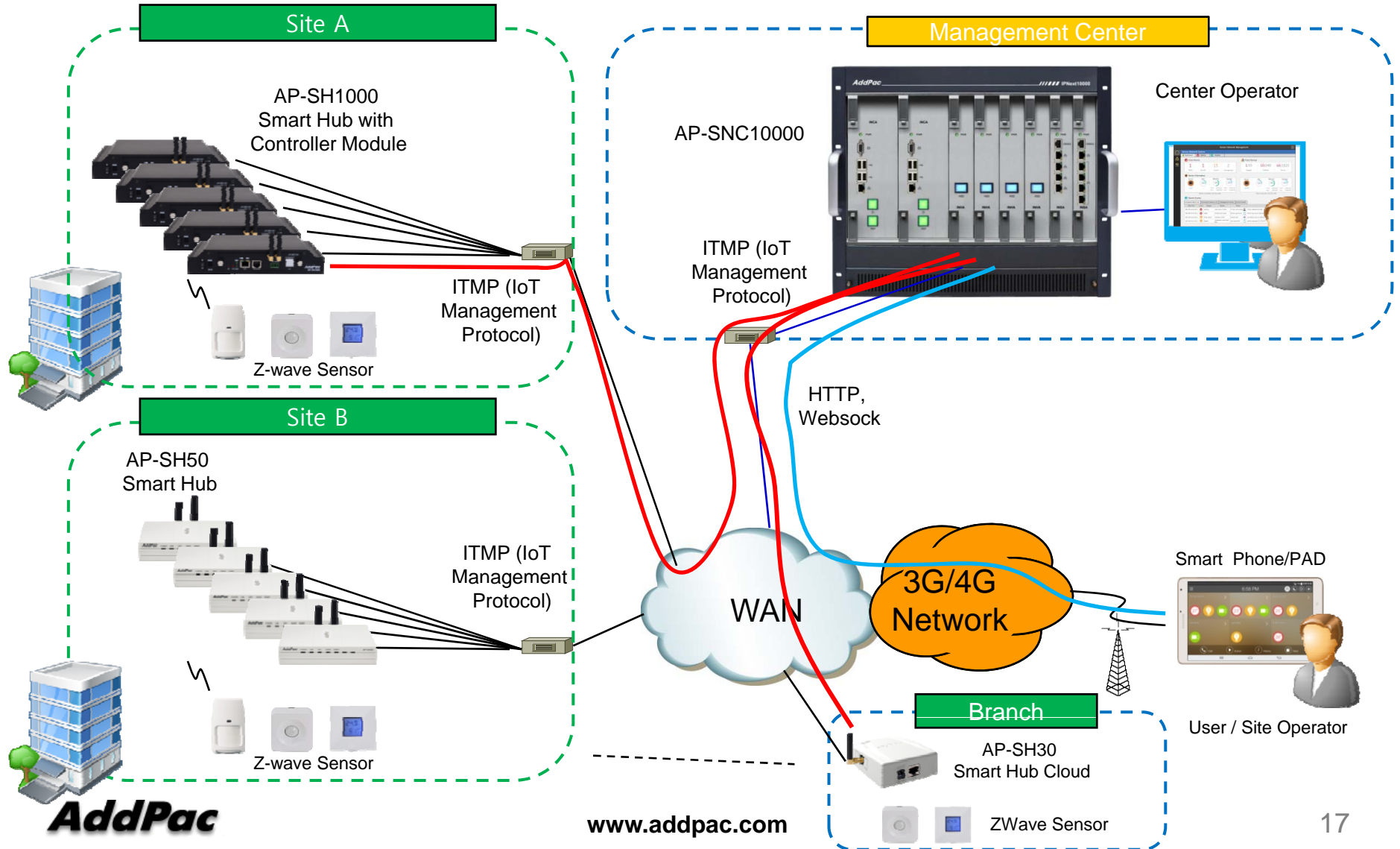
Multi Sites with Center Manager Model

AP-SNC10000 Smart Sensor Network Controller

- **Smart IoT Center Controller and Manager**
 - A management center has a AP-SNC10000 with **ITCS-MS™**, **ITMS-MS™** software modules with active-standby fault tolerant configuration.
 - **ITMS-MS™** is manager module for multiple sites which manages multiple sections and heretical group of sections in multiple sites.
- **Smart Hubs**
 - The Smart Hubs with / without built-in controller can be controlled and managed by **ITMS-MS™** in a center.

Multi Sites with Center Manager Configuration

AP-SNC10000 Smart Sensor Network Controller



Smart IoT Manager ITMS

AP-SNC10000 Smart Sensor Network Controller

- ITMS™ is software module to manage set of Smart Hubs and controllers.
- ITMS-SS™ can manage single site and ITMS-MS™ can manage multiple sites.
- It manages super administrator, site operator, group operator.
- It manages sites, groups, sections.
- It monitors alarms, events and logs.
- It monitors servers and devices in the site.
- It provides dashboard of site, group, and section.
- It provides provisioning, upgrade, replace of Smart Hubs.

Ordering Information

- AP-SNC10000 Smart Sensor Network Controller Platform-
 - One(1) System Dual Sensor Network Controller Main Body
- Built-in APOS Internetworking Software for AP-SNC10000
- Including 1 Year Hardware Warranty
- Product Documents
 - Install and Operation Guide (PDF)
- Pricing
 - AddPac Technology Regional Sales Manager
 - Authorized Sales and Marketing Representatives
 - Please Contact www.addpac.com



Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

Phone +82.2.568.3848 (KOREA)

FAX +82.2.568.3847 (KOREA)

E-mail sales@addpac.com