



## IAC700E

### Intelligent multi-service Wi-Fi controller

## Product Introduction

IAC700E is an industry-leading, high-performance, and enterprise-class wireless access controller, which employs advanced parallel multi-core processors to support flexible and rich interface expansion. IAC700E supports powerful wireless data processing, service monitoring, application analysis, and device management capabilities. IAC700E can be widely applied in various industries such as smart cities, business, education, government, and enterprise.

Compared to traditional wireless controllers, IAC700E adopts an x86 platform architecture, integrating wireless network control, wireless user authentication management, Portal content services, built-in RADIUS, data collection and aggregation, user Internet behavior logging, user application identification, and industry-specific applications into one unit.

## Product Feature

### Intelligent access point management

- Centralized configuration and management of all APs
- Zero-touch configuration for access point deployment
- Scalable up to 4096 Wi-Fi access points
- Supports load balancing to maximize the number of connected terminals and data traffic limitation per AP

### Superior user experience

- Excellent network coverage for various scenarios
- Supports up to 200,000 terminals per device
- Supports up to 256,000 MAC address entries per device
- Adopts multi-core and multi-thread processor
- Supports seamless authentication and Layer 2/3 roaming among multiple controllers

### Flexible network architecture and data forwarding modes

- Supports centralized or local forwarding (configurable)
- In centralized forwarding mode, all control and data traffic pass through the gateway, allowing users to monitor data to the fullest extent
- In local forwarding mode, only control traffic passes through the gateway (maintaining user management and security), which can save bandwidth and reduce network latency, suitable for various scales of network deployment
- Supports multi-tiered AC deployment

### Rich business and intelligent wireless features

- Supports user behavior tracking and WLAN information security management
- Identifies mobile applications, enabling big data analysis on users
- Monitors and alerts on the status of wireless terminals and service systems
- Integrates rich functions including authentication (such as SMS and app authentication), Portal content service, built-in HTTP ads, and local maintenance of ad content

### Robust security and high reliability

- Supports various access authentication methods such as 802.1x-based and Portal-based authentication
- Supports strict user access policies ensuring a safer access
- Provides various encryption methods such as WPA/WPA2

### Smart RF management

- Constantly monitors the wireless network
- Automatically configures AP's RF parameters and adjusts power and channel assignment
- Network recovers automatically in case of AP failure

## Product Specification

### Hardware Specifications

Item	Parameter description
Port/slot	<ul style="list-style-type: none"> <li>6 x GE ports</li> <li>2 x Gigabit optical ports</li> <li>2 x USB2.0 ports</li> <li>2 x Expansion slots</li> <li>1 x Console port</li> </ul>
Power consumption	75 W
Power supply	AC, 100~240V, 50/60Hz
Optional power supply	DC, -36V~-72V
Dimensions (W x H x D)	426 mm x 44 mm x 400 mm
Weight (fully loaded)	6.25 kg
Operating temperature	-10° C ~ +55° C
Storage temperature	-40° C ~ +70° C
Relative humidity	5% ~ 95% noncondensing
MAC addresses	256,000
ARP table entries	256,000
VLANs	4,096
Max manageable AP	<ul style="list-style-type: none"> <li>1,024 (centralized forwarding)</li> <li>4,096 (local forwarding)</li> </ul>
Max connected terminals	<ul style="list-style-type: none"> <li>16,000 (centralized forwarding)</li> <li>200,000 (local forwarding)</li> </ul>
Max built-in portal users	10,000

### Software Specifications

Item	Parameter description
WLAN	<ul style="list-style-type: none"> <li>Centralized and local forwarding</li> <li>CAPWAP channel encryption</li> <li>Automatic power adjustment and automatic channel selection</li> <li>SSID/USER based rate limiting</li> <li>Load balancing</li> <li>5GHz priority</li> <li>Multiple SSIDs/hiding SSID</li> <li>Intelligent service maintenance</li> <li>Performance monitoring and statistics</li> </ul>
Wi-Fi security	<ul style="list-style-type: none"> <li>ACL</li> <li>Portal authentication (based on SMS, APP, and username/password authentications, one-click authentication, and more)</li> <li>802.1x authentication</li> <li>User blacklist and whitelist</li> <li>SSID-based Portal pages pushing</li> <li>Multiple Portal templates</li> <li>User behavior recording</li> <li>Application identification</li> </ul>

### Software Specifications

Item	Parameter description
L2 & L3 functions	<ul style="list-style-type: none"> <li>Radio limiting</li> <li>AP isolation at layer 2 VLAN</li> <li>DHCP server</li> <li>DHCP snooping</li> <li>NAT</li> <li>NTP server</li> </ul>
Redundancy	1+1 stateful redundancy
System management	<ul style="list-style-type: none"> <li>Login through console, SSH, or Telnet</li> <li>Configuration based on CLI or Web UI</li> <li>Management and configuration via platform or APP</li> <li>Syslog system monitoring</li> <li>SNMP, Trap</li> <li>License-based capacity (AP quantity) control</li> </ul>

Note: Specifications are subject to change.

## Ordering

Product	Description
IAC700E <sup>a</sup>	Intelligent multi-service controller with AC Power supply
IAC700E-DC <sup>a</sup>	Intelligent multi-service controller with DC power supply
SK-CM-2XGEF <sup>d</sup>	Expansion card with two 10G SFP ports
SK-CM-4GEF <sup>d</sup>	Expansion card with four Gigabit SFP ports

License	Description
JadeOS-LIC-AP-16 <sup>bc</sup>	Licenses an IAC700E to manage 16 additional access points
JadeOS-LIC-AP-64 <sup>bc</sup>	Licenses an IAC700E to manage 64 additional access points
JadeOS-LIC-AP-128 <sup>bc</sup>	Licenses an IAC700E to manage 128 additional access points

<sup>a</sup> The number of access points that an IAC700E can manage is license-controlled. By default, IAC700E has no License.

<sup>b</sup> Once an upgrade license is imported, the total number of access points that the IAC700E can manage is increased by the number authorized by the license.

<sup>c</sup> For upgrade

<sup>d</sup> Optional component