API221n Wi-Fi access point

Industrial access point

Introduction

The Teldat API221n is an industrial access point housed in an IP40 protected aluminuim casing, design to meet the specific dust and temperature requirements typical of workshops, warehouses and facilities with special environmental conditions. It is equipped with exteranl antennas and can be mounted on the wall or on a DIN rail using the supplied brackets.

It is a flexible device and can be used either as a standalone WLAN controller for five additional access points, providing an excellent integrated solution for industrial areas, or centrally managed from Colibri NetManager.

Product Highlights

- Optimal for 2.4 or 5 GHz scenarios
- Multi-SSID (up to 16) and VLAN support
- WLAN controller 5+1 APs in master-AP mode
- Two Gb Ethernet LAN ports (1 PoE)
- IP40 aluminium casing (indoor)
- Temperature range (-20 to 50º C)
- DIN track for mounting on a panel or wall

Interfaces	Teldat API221n
2 x LAN 10/100/1000 Mbps LAN interfaces	Autosensing, auto MDI/MDIX
1 x 802.11abgn radio module with 2x2MIMO	1 or 2 transmission flows
2 x RSMA antenna connectors	Tx@2.4/18dBm=18/21 dBm with no antenna

Competitive Advantage

Range of APs for industrial environments	Access point that has been developed for harsh industrial environments and other places that require rugged equipment capable of handling special conditions.
Optimization functions	It suports airtime fairness, client load balancing, and per-client and per-SSID client (up to 250) and bandwidth limitation.
Simple and efficient administration	Web configuration (http/https), telnet, SSH, SNMP, CAPWAP support from WLC in Teldat router, Dime Manager (up to 50 devices), Colibri NetManager.
WLAN controller included	Master-AP mode allows you to manage and configure up to 5 additional access points.

Scenarios

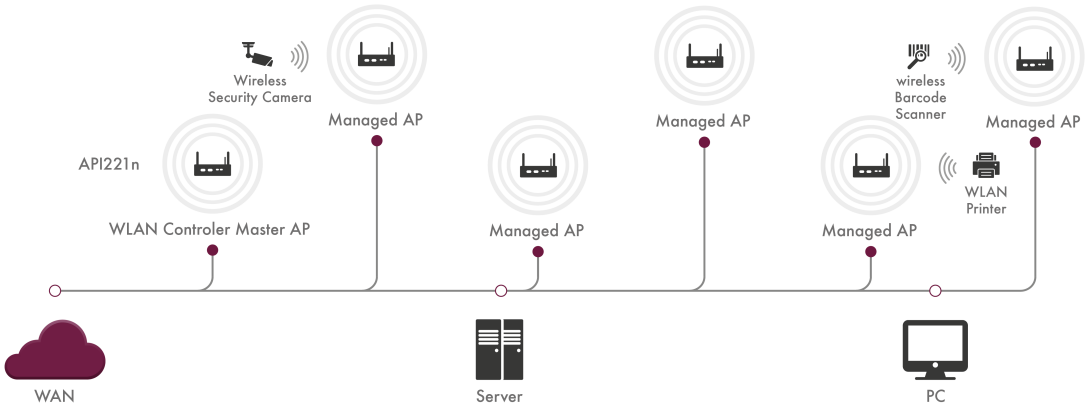

Figure: API221n master-AP operating mode

Key Features

802.11abgn Wi-Fi with 2x2 MIMO Configurable radio that supports 2.4 GHz (indoor/outdoor: 2412-2484 MHz) or 5 GHz (indoor:5150-5350 Mhz) with automatic channel selection and link speed auto-negotiation (ARS).

Up to 250 connected clients with limited bandwidth Bandwidth limitation per user and SSID.

Security through ACLs/802.11i/WIDS&WIPS Rogue AP/client detection and notification via SNMP/Syslog alerts from the WLC or shown on the dashboard for those with Colibri NetManager (CNM).

Traffic blocking between clients (intercell blocking) Clients connected to the access point can be prevented from seeing one another, thus providing an additional network security mechanism.

An 802.3af PoE power source or an external 9 V/1.3 A The equipment consumes a maximum of 6.5 W.

Traffic separation by SSID and VLAN It supports up to 16 SSIDs and 32 VLANs (802.1q). you can assign one VLAN per SSID to differentiate network traffic.

TPC and DFS for 5 GHz Power is automatically lowered in accordance with EN301893. Dynamic Frequency Selection operating without interruption every 24 hours.

Event and alert notifications Information with different levels of severity are sent via Syslog, SNMP traps or e-mail alerts.

Monitoring of neighboring networks & connected clients In-depth monitoring of the radio interface: SSIDs, connected clients, signal/noise, transfer rate, Rx/Tx packages.

Configuration and deployment with minimum IT resources Auto-configuration from a Teldat router as WLC or grom CNM, thus reducing the risk of configuration errors in large-scale deployments.

HARDWARE TECHNICAL FEATURES

Interfaces and connectors
LAN: 2x10/100/1000 Mbps,auto MDI/MDIX, RJ-45 connector
Wi-Fi: 1 x 802.11abgn (2.4/5 GHz) radio module, 2x2 MIMO
Kensington compatible security protection

Antennas
Two external dual band (2.4/5 GHz) antennas with RSMA
2.4/5 GHz antenna gain: 2 dBi

Power supply
Optional external line: 9 V/1,3A DC; 100-240 AC
European connector
Optional PoE injector: 802.3af or 803.3at.

Dimensions and casing
Approx. 15.0 cm x 12.0 cm x 4.1 cm (width x depth x height)
Resistant aluminium casing
IP40 certification

Environmental specifications and consumption
Operating temperature range: -20 to 50° C
Relative humidity: 10 to 95 % (without condensation)
Maximum consumption: 6.4 W

SOFTWARE TECHNICAL FEATURES

Wi-Fi interface
Automatic transfer rate and channel selection
MultiSSID, up to 16 per radio with MAC address for each one
SSID broadcast, alowed/blocked

Wi-Fi security and authentication
Open, WEP64/128, WPA Personal/Enterprise, WPA2 Personal/Enterprise
802.1x/EAP-MD5, 802.1x/EAP-TLS, 802.1x/EAP-TTLS, 802.1x/EAP-PEAP
Key Management, PSK/TKIP Encryption, AES Encryption

Management/Administration
HTTP/HTTPS, telnet, SSH, Dime Manager, Colibri NetManager
SNMP (v1, v2, v3), traps (v1, v2, v3), SNMP ACLs
Configuration backup/restoration

Supervision
Syslog client with different message severity levels
E-mail alerts
Programming reset, interface activation/deactivation, SSIDs, etc.

Managed by an external WLC or AP-master
CAPWAP (DHCP option RFC1517)
As master-AP, it manages up to 5 additional APs
Monitoring and statistics of managed APs

Wi-Fi optimisation
Airtime fairness, client load balancing & limitation, IAPP roaming(802.11f)
Bandwidth limitation per user and SSID
WMM 802.11e QoS

Detection mechanisms
MAC filtering
WIDS (Wireless Intrusion Detection System)
WIPS (Wireless Protection Detection System)

Operating modes
Standalone WLAN AP, managed by a WLC or Colibri NetManager
Point-to-point or point-to-multipoint WLAN bridge
WLAN client

VLANs
Supports IEEE 802.1q
Up to 32 VLANs

ADDITIONAL TECHNICAL FEATURES

Operating mode functions: WLAN client
DHCP client, DHCP server, DHPC relay
VPN: IPSec, L2TP, PTP, GRE
WEP60/128, WPA/WPA2 personal security

Certifications
WPA2 personal and DFS security for 5GHz
Point-to-point or point-to-multipoint connections (8 levels)
CE configuration

Operating mode functions: WLAN bridge
Configurable roaming (off, slow, normal, fast, custom)
Complete monitoring: link activation, signal/noise ratio, speed, etc.
It can act as master or client

NTP client, NTP server, manual configuration
R&TTE Directive 1999/5/EG; EN 60950-1 (IEC60950); EN 300 328
EN 301 489-17; EN 301 489-1; EN 301 893;

FLEXIBLE
COMMUNICATIONS SOLUTIONS
THAT GROW WITH YOU.

API221n Wi-Fi access point

Industrial access point

Teldat is a leading provider in Enterprise Communications equipment and Services for the top corporate to mid-sized and SME markets.

About TELDAT

ROUTERS | Wi-Fi | MANAGEMENT | TRANSPORT | SMART GRID | INDUSTRIAL | VoIP | CLOUD | SECURITY | NFV |

Teldat Group is a leading technology holding that desings, manufactures and distributes advanced Internetworking platforms for corporate environments, providing new and cutting-edge communication solutions without ever losing sight of its customers real requirements. Teldat's solutions development is based on proprietary technology, which is in the Group's DNA. This allows Teldat to be a leading provider in Enterprise Communications equipment and Services for the top corporate to midsized markets, as well as the SME and SoHo markets.

From a geographical viewpoint, Teldat Group has a presence in all continents, with its corporate headquarters located in Spain, and operational affiliates in Europe (Germany, Austria, Portugal, Italy and France) and in LATAM (Mexico and Brazil), as well as two business development offices in USA and China.

Teldat | GROUP | Headquarters

Spain
Teldat S.A.
Parque Tecnológico de Madrid
Tres Cantos - 28760
Madrid (Spain)
Phone:+34 91 807 6565
info@teldat.com

Germany
bintec elmeg GmbH
Suedwestpark 94. 90449

Nuremberg (Germany)
Phone: +49 911 9673 0
info@bintec-elmeg.com

Our sales offices contact details are on www.teldat.com

Publish Date: August 30, 2018
Version: 20180830075851