

## WLAN onboard access point DT-5422

Neratec DT-5422 is a dual concurrent 802.11ac MU-MIMO Wave2 solution for onboard and instructure Wi-Fi installations in public transport and harsh industrial environments. It supports the latest IEEE 802.11 networking standards, thus ensuring high data rates and reliable communications.

The DT-5422 is especially designed for high density multi-user application such as passenger Wi-Fi or public Wi-Fi applications. It is supported by network management tools and can be remotely managed using a standard web browser or SNMP management tools.



### Technology

- Based on latest IEEE 802.11ac Wave2 technology
- Supports 4x4 MU-MIMO (Multi User MIMO)
- Industrial temperature range (-40..+70°C)
- Guaranteed performance over the operating temperature range
- Excellent performance and flexible installations in harsh industrial and mobile environments

### Key Features

- Access point for hotspot applications
- Dual concurrent 2.4GHz and 5GHz
- Wireless data rates up to 1733Mbit/s + 867Mbit/s
- 20/40/80/160 MHz channel bandwidth
- Supports remote updates for device settings and firmware downloads
- Outdoor-proof solution
- EN50155 compliant



Robust and reliable dual 802.11ac  
solution for onboard Wi-Fi

## WLAN onboard access point, DT-5422

Functionality	802.11ac dual-concurrent access point for public transport and industrial applications
Operating Modes	Access point
Operating temp. range	-40...+70 °C
Power feed	Available with two powering options: 24 VDC (EN50155 nominal) and IEEE 802.3at type 1 PD 72 - 110 VDC (EN50155 nominal)
Size and weight	App. 58 x 110 x 193 mm (H x W x L) and approx. 1,2 kg, without antennas
Environmental protection	IP 66
Wireless standards supported	IEEE 802.11g, 802.11a, 802.11n, 802.11ac
Frequency range	2.400...2.4835 GHz 5.150...5.350 GHz, 5.470...5.725 GHz, 5.725...5.875 GHz
Occupied channel bandwidth	According to the IEEE 802.11
Data rates supported	802.11a/g: 6Mbit/s, 9, 12, 18, 24, 36, 48 & 54 Mbit/s 802.11n 20MHz BW, LGI/SGI: from MCS0 6.5/7.2 Mbps to MCS23 195/216.7 Mbps 802.11n 40MHz BW, LGI/SGI: from MCS0 13.5/15 Mbps to MCS23 405/450 Mbps 802.11ac 20MHz BW, LGI/SGI: from VHT0 6.5/7.2 Mbps to VHT9 312/346.7 Mbps 802.11ac 40MHz BW, LGI/SGI: from VHT0 13.5/15 Mbps to VHT9 720/800 Mbps 802.11ac 80MHz BW, LGI/SGI: from VHT0 29.3/32.5 Mbps to VHT9 1560/1733.3 Mbps 802.11ac 160MHz BW, LGI/SGI: from VHT0 58.5/65 Mbps to VHT9 1560/1733.3 Mbps (2SS)
RF transmit power 2.4GHz*	Max. conducted transmit power, 802.11g/n, up to +18dBm for all data rates
RF transmit power 5GHz*	Max. conducted transmit power, 802.11a/n/ac, up to +18dBm for all data rates
RF antenna interfaces	4 x QMA compatible antenna connectors, 4x4 MU-MIMO for 5GHz 2 x QMA compatible antenna connectors, 2x2 MIMO for 2.4GHz
Receiver sensitivity (typical)	-95 dBm (6 Mbit/s), -85 (36Mbit/), -80 dBm (54 Mbit/s) 20MHz: -95 dBm (MCS0), -79 dBm (MCS7), -75 dBm (MCS8) (max. 4SS) 40MHz: -92 dBm (MCS0), -77 dBm (MCS7), -71 dBm (MCS9) (max. 4SS) 80MHz: -88 dBm (MCS0), -74 dBm (MCS7), -67 dBm (MCS9) (max. 4SS) 160MHz: -88 dBm (MCS0), -74 dBm (MCS7), -67 dBm (MCS9) (max. 2SS)
MIMO features supported	Space Time Block Coding (STBC), RX Low Density Parity Check (LDPC), Maximum Likelihood Demodulation (MLD), Maximum Ratio Combining (MRC), Multi-User-MIMO (MU-MIMO), Transmit Beamforming (TxBF)
Client connectivity management	Configurable max. number of clients, client steering between AP's, band steering between bands, air time fairness between clients
Security	IEEE 802.11i WPA2 (AES/TKIP), 802.1X, 802.11w
Ethernet interface	2 x 10/100/1000Base-T, 2 x M12 X-coded connectors
Ethernet routing / networking	Fixed fallback IP, IP aliases, MAC address control lists, Port forwarding, Routing, Multicast Routing, DHCP Server/Client, NAT, VLAN support, Multi BSSID, NTP client, SNMP v2c and v3 with USM authentication and encryption support, SNMP Traps, RSTP
Monitoring features	Build in monitoring sensors and diagnostics
Device management	SNMP, HTTP/HTTPS with user authentication, CLI (SSH and Telnet)
Standards supported	CE, FCC 47 CFR Part 15, EN301 893, EN300 328, EN301 489-1/-17, EN60950, EN50121-3-2, EN50121-4, EN50155, EN45545, NFPA130

\* Note: Depending on the regulatory limitations and selected antennas