VOCERA

The B3000n Communication Badge

Higher Quality Audio and Better Voice Recognition

Product Overview

Delivering a secure, integrated, and intelligent communication solution for customers, the Vocera® B3000n Communication Badge builds upon the success of the B3000 Communication Badge and is a key component of the Vocera Communication System created to deliver a secure, integrated, and intelligent communication for our customers. The Vocera Badge has been designed from the ground up to meet the requirements of highly mobile workers who need to stay connected while keeping their hands free to perform their regular job duties. Utilizing an enterprise class Wi-Fi network, the Vocera Badge delivers hands-free, real-time voice communication between customers whenever needed.

The wearable Vocera Badge weighs less than two ounces, allowing users to keep their hands free without the burden of carrying a smartphone. With a highly durable design, the Vocera Badge is built to withstand the rigors of challenging environments. Acoustic tuning through the use of four microphones and advanced noise reduction technology greatly improves the hands-free audio experience to users while providing greater accuracy for voice recognition.

Features

- The dual-band radio permits the B3000n to utilize both the 2.4GHz and the 5GHz Wi-Fi spectrum. 5GHz is less susceptible to noise and interference from other radio devices, leading to higher voice quality and better voice recognition.

- The B3000n contains an illuminated Halo around the call button; this Halo provides a visual indication of the Badge call status. It glows green when on an active call, and pulses amber when on Do Not Disturb or on hold. The illuminated Halo can also be used to indicate when text messages are waiting to be read.

- A large front facing speaker provides hands-free audio in order to clearly hear the conversation without having to hold the Vocera Badge in the hand.

- Four microphone design and integrated Acoustic Noise Reduction (ANR) reduce background conversations and noise interference to improve speech recognition in noisy environments.

- Multi-user operation (shared device) permits a Vocera Badge to be passed to another user at the end of a shift, allowing the new user to log into the Vocera system from the Vocera Badge and immediately begin using it.

B3000n Badge uses an illuminated Halo to provide visual indication of call status.

Feature	Benefit
Weighs less than 2 oz (53.9g)	Lightweight, wearable design ensures the Badge is readily available and easy to use
Voice-controlled, one-button operation	Virtually hands-free use to allow staff to keep working while communicating
Durability	Structurally rugged design with independent spine and reinforced Badge housing provide durability for any environment
Wireless performance	802.11n dual-band supports 2.4GHz and 5GHz Wi-Fi providing excellent connectivity, leading to improved audio quality and voice recognition
User convenience	• High contrast OLED display on the front of the Badge to facilitate ease of readability • Illuminated Halo to provide visual indication of call status • Do-not-disturb button to eliminate interruptions when necessary
Wearable accessories	• Headset jack to facilitate private conversations • Multiple wearing options including a double breakaway lanyard for safety
Antibacterial	BioCote® antimicrobial technology inhibits the growth of microorganisms

3.9"
9.8cm

1.4"
3.6cm

System Requirements

Vocera Server Software release 4.3 SP4, 4.4.3 or higher

Specifications

Vocera Badge Specifications

Physical Dimensions
- 3.9 x 1.4 x 0.7 in. (9.8, 3.6, 1.8 cm)

Weight
- 1.9 oz. (53.5 g), with battery

LED Indicators
- Bi-color LED, illuminated halo

Display Screen
- 80 x 82 OLED bit-mapped display
- Displays 4 lines of text, 15 characters per line, up to 150 characters per message (font dependent)

Controls
- Call button
- Hold/do-not-disturb button
- Volume/Menu selection buttons

Headset Support
- 2.5 mm headset jack

Electrical
- RF Output Power (2.4GHz): 16 dBm at 802.11b, 18 dBm at 802.11g
- RF Receive Sensitivity (2.4GHz): -85 dBm at 11 Mbps, -71 dBm at 54 Mbps, -69 dBm at 802.11, 802.11n
- RF Output Power (5GHz): 16 dBm at 802.11, 802.11n
- RF Receive Sensitivity (5GHz): -90 dBm at 6 Mbps, -73 dBm at 54 Mbps, -70 dBm at HT20 MCS7, -68 dBm at HT40 MCS7

Microphone Frequency Range
- 350 Hz to 3.75 kHz

Directional Microphones
- Quad MEMS Microphone array

Speaker Frequency Range
- 500 Hz to 3.75 kHz

Peak Speaker Loudness
- 85 dBSPL at 10 cm

Battery
- Lithium ion polymer

Battery Life
- With standard battery—approx. 3 hours talk time (with UAPSD enabled), 30 hours of standby time
- With extended battery—approx. 5 hours talk time (with UAPSD enabled), 60 hours of standby time
- With B3000 series battery—approx. 4 hours talk time(with UAPSD enabled), 40 hours of standby time

  Battery life estimates based on a full charge and environmental factors. Actual battery life may vary from the estimates quoted.

Environmental

Operational Ranges
- Temperature Range: 0°C to 40°C
- Humidity Range: 5 to 95% relative humidity, non-condensing

Storage Ranges
- Temperature Range: -20°C to 40°C
- Humidity Range: 5 to 95% relative humidity, non-condensing

Drop Specifications
- 1.5 meters onto concrete

Wireless Specifications

Network Standard
- IEEE 802.11a, 802.11b, 802.11g, and 802.11n, 802.11k, 802.11r, 802.11w

Frequency Band
- 2400-2484 MHz, 5180-5805 MHz

Data Rates Supported
- 1, 2, 5.5, 11, 6, 9, 12, 18, 24, 36, 48, 54 Mbps, MCS0-MCS7

Wireless Medium
- Direct Sequence Spread Spectrum (DSSS)
- Orthogonal Frequency Division Multiplexing (OFDM)

Media Access Protocol
- Carrier sense multiple access with collision avoidance (CSMA/CA)

Modulation 2.4GHz
- DBPSK at 1 Mbps
- DQPSK at 2 Mbps
- CCK at 5.5 and 11 Mbps
- BPSK at 6 and 9 Mbps
- 16-QAM at 24 and 36 Mbps
- 64-QAM at 48 and 54 Mbps

Modulation 5GHz (HT20)
- DBPSK at 6.5 and 7.2 Mbps
- DQPSK at 13, 14.4, 19.5, and 21.7 Mbps
- 16-QAM at 26, 28.9, 39 and 43.3 Mbps
- 64-QAM at 52, 57.8, 58.5, 65 and 72.2 Mbps

Modulation 5GHz (HT40)
- MCS0-MCS7 at 13.5, 15, 27, 30, 40.5, 45, 54, 60, 81, 90, 108, 120, 121.5, 135 and 150 Mbps

Operating Channels (2.4GHz)
- 11 channels (FCC)
- 13 channels (ETSI)

Operating Channels (5GHz)
- 20 channels HT20 (FCC)
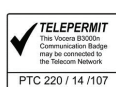- 9 channels HT40 (FCC)
- 56 channels ETSI (varies by country)

Roaming
- IEEE 802.11a, 802.11b, 802.11g, 802.11n, 802.11r, 802.11k compliant

WLAN Security
Vocera supports standard and vendor-specific security suites. The following modes are supported:

- Encryption: None, 64-bit and 128-bit WEP, TKIP, AES-CCMP
- Authentication: Open, Pre-shared Key, Cisco EAP (LEAP2) using 802.1x framework, PEAP v0 MSCHAPv2, EAP-FAST with AutoPAC, EAP-TLS, 802.11w
- Fast Roaming: CCKM, TLS session resumption
- Fast BSS Transition

Vocera B3000n Badge

- White Vocera Badge (220-01576)
- Black Vocera Badge (220-01569)

Available Accessories

Attachments

- Lanyard (230-01995)
- Universal Clip (230-01985)

Batteries

- Standard Battery – White (230-01977)
- Standard Battery – Black (230-01980)
- Extended Battery – White (230-02021)
- Extended Battery – Black (230-02020)
- B3000 Series – White (230-01925)
- B3000 Series – Black (230-01924)

Chargers

- B3000 Single-Bay Charger (230-02001)
- B3000 Single-Bay Charger, with AU/NZ Adapter (230-01751)
- B3000 Single-Bay Charger, with UK Adapter (230-01781)
- B3000 Single-Bay Charger, with EU Adapter (230-01991)
- B3000 8-Bay Charger (230-02008)
- B3000 8-Bay Charger, with AU/NZ Power Cord (230-01558)
- B3000 8-Bay Charger, with UK Power Cord (230-01978)
- B3000 8-Bay Charger, with EU Power Cord (230-01998)

For More Information

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