

DATA SHEET



Ascom Myco 3 Wi-Fi

Features

- Android™ 10¹
- Android™ Enterprise Recommended rugged device with Android security updates until end of 2027
- FIPS 140-2 validated cryptographic module
- Support for Ascom apps and third-party apps
- Ascom telephony over Wi-Fi, with direct PBX integration and support for multiline VoIP
- Google Mobile Services (Google apps and services)²
- Shared phone capability
- Professional barcode scanner supporting 1D/2D barcodes and Postal Codes
- Barcode scanning preview (Viewfinder)
- Man-Down and No-Movement detection
- Location services: Ascom IR, BLE, and Wi-Fi with AiRISTA Flow
- Zone location with IR for Automated nurse presence
- Optimized for use in medical gloves
- Headset support
- Compatible with charging racks and desktop chargers
- PTT functionality using one of Ascom Myco 3 multifunction buttons or the BlueParrott™ headset button ⁴

Physical Design

- Durable and robust
- Easily replaceable battery to support long shifts
- True hot-swappable battery
- IP67 dust and liquid resistant
- Configurable multifunction buttons, e.g. personal alarm and barcode scanning
- Multicolor top LED
- Built-in carrying clip (removable)
- Disinfection-ready for daily cleaning
- Corning® Gorilla® Glass 3³

Network

- Supports Wi-Fi 802.11 a/b/g/n/ac
- Fast transition roaming 802.11 k/r/v for continuous connectivity

Administration

- Large scale deployment via Zero-touch, QR code and NFC
- Managed configuration (OEMConfig app)
- Over-the-air administration via EMM (Enterprise Mobility Management)

1. Android is a trademark of Google LLC.

2. Google and other related marks are trademarks of Google LLC.

3. Corning and Gorilla are registered trademarks of Corning Incorporated.

4. BlueParrott is a trademark of GN Audio A/S.

Technical Specifications	
Overview	
Operating system:	Android™ 10
CPU:	2.3/1.8 GHz Octa-core
GPU:	3D Hardware accelerated graphics
Internal memory:	64 GB Flash, 4 GB RAM
External connections:	Micro USB v2.0 or higher (charging and data transfer/configuration) 3.5 mm headset jack
Sensors:	NFC, three-axes accelerometer, three-axes gyroscope, proximity sensor, light sensor, Ascom IR location
Browser:	HTML5
Buttons:	Power button, Volume button (up/down), Multifunction buttons, Home button, Back button, Overview button
Available languages:	Ascom specific: Chinese (simplified), Danish, Dutch, English, Finnish, French, German, Italian, Norwegian, Polish, Portuguese, Portuguese (Brazil), Russian, Slovak, Spanish, Swedish Supported Android languages: approx. 60
Dimension (H×W×D):	150 x 76 x 14/16 mm (5.90 x 2.99 x 0.55/0.63 in)
Weight:	239 g (8.43 oz)
Color:	Black
Cover:	Aluminum chassis
Carrying:	Removable carrying clip (easy carry, prevent drops) with exchangeable color stickers (4 colors: red, yellow, green, blue)
Display	
Type:	TFT LCD, Deca capacitive touchscreen
Size and resolution:	Diagonal 12.7 cm (5"), 1920 x 1080 display (441 ppi) FHD
Protection:	Corning® Gorilla® Glass 3
Indication	
Types (notifications):	Multicolor LED, vibration, ringtones, message beeps, notification sounds
Camera	
Flash:	Yes (can also be used as flashlight)
Auto focus:	Yes
Front-facing camera resolution:	2592 x 1944 pixels (5 Megapixels)
Rear-facing camera resolution:	4160 x 3120 pixels (13 Megapixels)

Specifications are subject to change without notice

Audio	
Voice quality:	Wideband audio, HD audio
Transmission:	Full duplex (simultaneous talking and listening)
Loudspeaker:	Duplex loudspeaking function
Maximum sound ring signal level:	88 dBA at 10 cm
Hearing aid:	American (US) Hearing Aid Compatible (HAC) standard
Microphone:	Speech microphone at the bottom side Noise canceling microphone on the top side
Battery	
Type:	Main easily replaceable Li-ion 2935 mAh battery Built-in Li-ion 200 mAh battery for uninterrupted operation during hot swapping of the main battery
System stand-by time:	Up to 130 hours
Speech time:	Up to 24 hours
Charging time:	Approx. 5 hours in CR7 charging rack and CR8 battery pack charger Approx. 5 hours in DC5 desktop charger Up to 4 hours using Micro USB cable connected to a power outlet Up to 6.5 hours using Micro USB cable connected to a PC NOTE: Using bad cables and not following environmental conditions can prolong charging time.
Headset	
660515	Headset adapter with QD 3.5 mm
660508	Headset “mic on boom” with QD, BIZ 2400 II (requires adapter 660515)
Allowed headsets:	Any Android compatible 3.5 mm headset Headset connector for Android compatible headsets, CTIA pinout
Accessories	
CR7-AAAA	CR7 charging rack
CR8-AAAA	CR8 battery charging rack
DC5-AAAB	DC5 desktop charger (including single battery charger)
660578	Battery pack (incl. battery cover)
660579	Color stickers for clip
660586	Micro USB cable
660587	USB Power supply (delivered with interchangeable plugs for EU, UK, USA/CA, and AU/NZ)

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660580	Cover rear, no clip
660585	Cover rear, with clip
660589	Replacement screen protector kit
Bluetooth	
Supported version:	4.1 with Bluetooth Low Energy (BLE)
Radio spectrum:	ISM 2.4000 — 2.4835 GHz
Output power:	Class 1, maximum 10 dBm
BLE beacon protocols:	iBeacon
NFC	
Modes & supported standards:	Read/write: NfcA (ISO14443-3A) NfcB (ISO14443-3B) NfcF (JIS 6319-4) NfcV (ISO 15693) soDep (ISO 14443-4) NFC Forum Tag Types 1, 2, 3, 4, 5 (defined by the NFC Forum)
	Peer-to-peer: NFCIP-1 (ISO 18092) LLCP 1.1 SDP 1.0 NDEF Push Protocol SNEP 1.0
	Host Card Emulation
Ascom Infrared Location Receiver	
IR wavelength:	940 nm
Carrier frequency IR:	38.7 kHz / 40.6 kHz
Modulation:	FSK
Interference handling:	Yes, capable to handle interference such as sunlight and EMI

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Supported Barcodes

1D symbologies:	UPC / EAN	Code 93
	Bookland EAN	Code 11
	UCC Coupon Code	MSI
	ISSN EAN	GS1 DataBar
	Trioptic Code 39	Code 128
	Code 32	GS1-128
	Composite Codes	Code 39
	Codabar	Chinese 2 of 5
	Inverse 1D	Korean 3 of 5
	Discrete 2 of 5	
2D symbologies:	PDF417	Aztec Inverse
	MicroPDF417	Data Matrix
	Maxicode	Data Matrix Inverse
	Aztec	QR Inverse
	QR Code	Han Xin Inverse
	MicroQR	Han Xin
	Composite TLC-39	
Postal codes:	US Postnet	Australian Postal
	UK Postal	Netherlands KIX Code
	Japan Postal	USPS 4CB / One Code / Intelligent Mail
	US Planet	UPU FICS Postal
Decode ranges examples:	Code 128 (barcode size 5 mil): near 5.1 cm (2.0 in); far 12.2 cm (4.8 in)	
	Code 39 (barcode size 5 mil): near 4.3 cm (1.7 in); far 14.7 cm (5.8 in)	
	PDF417 (barcode size 6.6 mil): near 4.1 cm (1.6 in); far 12.4 cm (4.9 in)	
	Data Matrix (barcode size 10 mil): near 3.0 cm (1.2 in); far 12.4 cm (4.9 in)	
	QR (barcode size 10 mil): near 2.8 cm (1.1 in); far 13.2 cm (5.2 in)	
	UPCA (barcode size 100%): near 5.1 cm (2.0 in); far 26.9 cm (10.6 in)	
	Code 39 (barcode size 20 mil): near 5.3 cm (2.1 in); far 34.5 cm (13.6 in)	
SIP Telephony		
Protocols:	SIP supporting RFC3550, RFC4566, RFC4733, RFC4734, RFC3261, RFC3264, RFC6665, and RFC3515	
Encryption protocol:	SRTP including TLS	
Voice codecs:	G.711 A-law (EU), G.711 u-law (US), G.722, G.729	

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Wi-Fi	
Supported standards:	802.11 a/b/g/n/ac 802.11 k/r/v fast transition roaming
Frequency range:	EU (ETSI): b/g: 2.4–2.483 GHz (Ch 1-13) a: 5.15–5.35 GHz (Ch 36-64), 5.47–5.725 GHz (Ch 100-140) USA (FCC): b/g: 2.4–2.473 GHz (Ch 1–11) a: 5.15–5.35 GHz (Ch 36-64), 5.47–5.835 GHz (Ch 96-165) Canada (IC): b/g: 2.4–2.473 GHz (Ch 1–11) a: 5.15–5.35 GHz (Ch 36–64), 5.47–5.59 GHz (Ch 96–116), 5.65–5.835 GHz (Ch 132–165) NOTE: The 5.600–5.650 GHz frequency band is disabled for use.
Maximum output power:	100 mW / 20 dBm
Data rates:	802.11 a/n/ac - Single stream - MCS0-9 - 20/40/80 MHz: Up to 433 Mbit/s 802.11 b/g/n - Single stream - MCS0-7 - 20/40 MHz: Up to 150 Mbit/s
Radar detection:	802.11h
Regulatory domain:	Country dependent
Network selection (SSID):	Multiple, auto selection, and manual selection
Quality of Service (QoS):	WMM
Security standard:	802.11i
Encryption methods:	AES-CCMP
Encryption protocols:	TLS 1.1, TLS 1.2, and TLS 1.3 for Wi-Fi
Authentication methods:	802.1X Original IEEE 802.11 open, WPA-PSK, WPA2-PSK, PEAP-MSCHAPv2, EAP-TLS, EAP-TTLS, MSCHAPv2 Authentication certificate
Roaming enhancements:	Opportunistic Key Caching, PMKSA caching
Receiver sensitivity (typical values):	-87 dBm (802.11a, 6 Mbit/s), -93 dBm (802.11b, 1 Mbit/s), -87 dBm (802.11g, 6 Mbit/s), -86 dBm (802.11n, MCS0)
Antenna:	Internal integral
Product Variants	
SH2-ABAA	Ascom Myco 3 Wi-Fi
SH2-ABBA	Ascom Myco 3 Wi-Fi EU

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Environmental	
Operating temperature:	-20° to 60° C (-4° to 140° F)
Storage temperature:	-20° to 50° C (-4° to 122° F), less than 1 month for the battery NOTE: Storing Li-ion batteries at high temperature dramatically reduces their capacity.
Charging temperature:	5° to 40° C (41° to 104° F)
Enclosure protection:	IP 67
Disinfection possibilities:	Daily up to five times with Ethanol 85%, VirkonS 1%, and also Isopropyl/ Isopropanol 85% Sporadic up to one time a week with Ethanol 85%, and also Chlorhexidin 0.5 mg/ml
Medical gloves:	The device is verified for use in the following gloves: Nitrile gloves with the thickness of 0.05 mm Vinyl gloves with the thickness of 0.035 mm
Immunity to electrostatic discharge (ESD):	8 kV contact discharge and 15 kV air discharge (EN61000-4-2)
Free fall test:	IEC 60068-2-31, procedure 1, dropped 12 times from 1.2 meters IEC 60068-2-31, procedure 2, dropped 1000 times from 0.5 meters NOTE: IEC 60068-2-31 supersedes IEC 60068-2-32 and requirements are equivalent in free fall test.
Drop test (shock test):	Multiple drops over a concrete block according to MIL-STD-810G

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Compliance to Regulations and Standards

Bluetooth marking:



BT QD: D044287

Compliance with European and UK Regulations and Standards

Product marking/certification:



EU directives and regulations:

RoHS in Electrical and Electronic Equipment Regulations 2015/863 amending 2011/65/EU
 REACH Regulation (EC) 1907/2006
 Battery Directive 2006/66/EC amending 2013/65/EU
 Packaging Directive 94/62/EC
 WEEE Directive 2012/19/EU
 RED Directive 2014/53/EU

UK directives and regulations:

RoHS in Electrical and Electronic Equipment Regulations 2012
 The REACH Enforcement Regulations 2008
 The Batteries and Accumulators (Placing on the Market) Regulations 2008 and the Waste Batteries and Accumulators Regulations 2009
 The Packaging (Essential Requirements) Regulations 2015
 The Waste Electrical and Electronic Equipment Regulations 2013
 Radio Equipment Regulations 2017

Radio:

EN 300328, EN 301893, EN 303413, EN 300440, EN 300330

SAR (Specific Absorption Rate):

EN 50360 (close to ear) 0.093 W/kg (10 g)
 EN 50566 (handheld/body mounted) 0.065 W/kg (10 g)

Safety:

EN 62368-1, EN 60601-1

EMC:

EN 301489-1, EN 301489-3, EN 301489-17, EN 301489-19, EN 55032, EN 55035, EN 60601-1-2

Compliance with US Regulations and Standards

Product marking/certification:

FCC ID: BXZSH2

SAR (Specific Absorption Rate):

FCC 47CFR §2.1093(d) and IEEE Std. 1528
 Normal operation 1.351 W/kg (1 g).
 Body worn operation 0.417 W/kg (1 g).

EMC/Radio:

FCC 47CFR Part 15 Subpart B, FCC 47CFR Part 15 Subpart C, FCC 47CFR Part 15 Subpart E

Safety:

UL 62368-1

Hearing aid:


FCC 47CFR part 68

Specifications are subject to change without notice

Compliance with Canadian Regulations and Standards

Product marking/certification:	ISED: 3724B-SH2
SAR (Specific Absorption Rate):	RSS-102, Issue 5 Normal operation 1.351 W/kg (1 g) Body worn operation 0.417 W/kg (1 g)
EMC/Radio:	RSS-247, RSS-210, ICES-003
Safety:	CAN/CSA-C22.2 NO. 62368-1-14
Hearing aid:	CS-03 Part V Issue 9

Compliance with Australian and New Zealand Regulations and Standards

Product marking:	
EMC/Radio:	AS/NZS 4268, EN 55032
Audio:	AS/ACIF S004
Safety:	AS/NZS 62368:2018
SAR (Specific Absorption Rate):	EN 50360 (close to ear) 0.093 W/kg (10 g) EN 50566 (handheld/body mounted) 0.065 W/kg (10 g) AS/NZS 2772.2 IEC 62479

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