

The Ultimate Ultra-rugged for **Enterprise Mobility based on 5G**

S70





Industry & Applications



Retail - Store associates

- · Price/Inventory checks
- · Item locator
- · Line busting
- · Assisted selling
- Task management
- · Front of store replenishment
- · Price management
- · Inventory/cycle counts



Retail – Store managers

- Fleet Management
 - · Planogram management
 - · Promotion compliance
 - Merchandising
 - · Back of store management



Field Service Technicians

- · Invoicing & Asset management
- · Staff Communication



Postal Carriers/Courier Drivers

- · Location services & Proof of Delivery
- · Asset & Fleet management
- · Packing & Staging & Invoicing
- · Work Order Validation



Public Official

- · eCitation & Situational awareness
- Communication and Collaboration
- · Parking & Traffic Law Enforcement
- · Identification Authentication
- Patrol Mobile Solution

BOS™ Solutions & Software

- BOS[™] Provisioning; Staging; Kiosk;
- Virtual Key; BOS[™] Keyboard
- BOS[™] VoIP
- BOS[™] PTT, PTT Essential
- BOS[™] Wi-Fine[™] (WiFi analyze application)
- BOS[™] EMM
- BOS[™] OTA
- BOS™ OemConfig

Third Party Solutions Integration

- · EMM: Airwatch, MobileIron, Mobicontrol, IBM MasS360, XenMobile
- · PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT, RealTalk

The Bluebird S70 is the next generation rugged device offering enhanced specifications and durability compared to non-rugged devices. Its robust design ensures improved resilience. The device features prominent blue side buttons for increased visibility and incorporates cutting-edge technologies in its camera, PTT key, and display.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Fast and Stable Network

Experience rapid business progress with Wi-Fi 6E & 5G. The S70 provides fast and stable performance even in large facilities via CBRS private LTE networks.

Robust & Slim Design

The S70 features improved durability and an ergonomic design, making it thinner, larger, and stronger. It can withstand drops of 3.05m (10ft) and 2,000 tumbles from 1.0m (3.3ft). Gorilla Glass is applied to the Touch Panel and Imager.

Speed upgrade to another level

Enhance work efficiency with the Qualcomm® 6490 octa-core processor, up to 8GB of RAM, 128GB of Flash storage, and a 2TB MicroSD card slot.

6-inch Display with Best-in-Class **Outdoor Readability**

The S70 is waterproof and dustproof, and the screen offers clear visibility under bright sunlight. Bluebird's multitouch technology supports glove and stylus input.



Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Cutting-edge Battery technology

Bluebird's BOS Power Manager supports standard 5000 mAh and extended 7000 mAh batteries, providing ample power supply and long operating hours. The S70 boasts the best battery capacity in its class.

Two Scanning Range Options

Choose between the standard range SE4770/SE4720 (Optional) 1D/2D scan engine or the SE55 1D/2D scan engine for extended scan range.

High-Resolution Camera

Capture high-quality pictures with remarkable clarity using the integrated 16 MP camera.

Supportive Microphone and Speaker

Three microphones and two speakers enhance communication with co-workers.

CONVENIENT CONNECTION & COMMUNICATION

Location-Free Two-Way Communication

BOS PTT, a subscription-based Push-to-Talk (PTT) Essential service, enables communication regardless of location. BOS PTT facilitates sending and receiving calls and messages over a WiFi network.

Efficient Parcel Dimension Checking

The S70 supports Time of Flight (ToF) sensor to quickly and easily check parcel dimensions, saving time.

World Class RFID Reader Connection Available

The RFR900 and RFR901 handheld UHF RFID readers offer fast and safe operation. The RFR900 can read 900 tags per second, while the RFR901 can read 1200 tags per second. Integrating Bluebird's adapter mount, Bluetooth, NFC, and using Wi-Fi-6e allows for reliable data management on the connected reader.

MANAGE YOUR WORK EFFICIENCY WITH BOS OF BLUEBIRD

Reliable Security System

BOS SecureCare for Android™ provides secure device protection. BOS Kiosk allows for restricting apps and device features.

Simple Device Management

Manage multiple devices by scanning with Bluebird Zero-Touch. BOS Wi-Fine ensures stable Wi-Fi connections. Control Google Services using Non-GMS OS Control. Manage the device on BOS one scan without need for repairs.

Easy Application Performance and Data Management

Utilize the BOS SDK, a custom development tool for enterprise applications, for rapid and optimized application development. Bar code data can be easily managed using the Data Wedge API.

Easily Locate Lost Devices

BOS Device Tracker helps in quickly finding lost devices, even if the battery is discharged or the device is off.

Increase Work Efficiency

Terminal Emulation and BOS™ Keyboard provide the necessary touchscreen and keyboard for data management. BOS one scan assists in selecting barcodes, and OCR helps capture standardized data.



Specifications

PERFORMANCE CHARACTERISTICS

CPU

Qualcomm Snapdragon™ QC6490 octa-core, 2.7 GHz

Operating System

Android 12: Upgradeable to Android 16

Memory

6GB RAM/ 64GB UFS Flash 8GB RAM/ 128GB UFS Flash (Optional)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)

174 × 86.3 (Grip: 80.75) x 26 (Grip: 19.6) mm

Weight

340 g

Display

6" FHD+ (1080×2160)

Imager Window

Corning® Gorilla® Glass 5

Touchpanel

Multi-mode capacitive touch with bare or gloved fingertip input or conductive stylus (sold separately), Corning Gorilla Glass; water droplet rejection; fingerprint resistant anti-smudge coating

Backlight

LED backlight

Power

Rechargeable Li-Polymer, BOS™ PowerManager for realtime battery management Standard capacity 5000mAh / 19.25 Watt hours;

Extended capacity 7000mAh / 26.95 Watt hours; *Fast charging & Hot Swap battery mode (All SKUs)

BLE Beacon Battery 5000mAh

Qi compatible Wireless charging battery 5000mAh

Hot swap

Supported

Expansion Slot

User accessible MicroSD; supports up to 2TB

SIM / SAM

WWAN SKU Only: 1 Nano SIM; 1 eSIM

Interface

Rear: 8-pin communication connector Bottom: USB-C 3.1 OTG w/DP mode 2-pin Charging Connector

Notification

Audible tone; multi-color LEDs; Scan LED; vibration; Haptic Feedback

Keypad & Button

On-screen keypad and BOS™ Keyboard power button; Volume up/down buttons; Dual-action side scan buttons; Dedicated PTT Button; button of trigger handle via Back I/O.

Voice and Audio

Three microphones with noise-cancellation; Vibrate alert; High-quality Dual speaker phone; PTT headset USB-C Type support; Bluetooth wireless headset support, SWB & FB audio cellular circuit switch voice; HD voice

PTT Hot Key

Support Dedicated PTT Button

WIRELESS WAN DATA AND VOICE COMMUNICATIONS

Frequency

Band

- 5G FR1: n1/2/3/5/7/8/12/13/14/20/25/26/28/29/38/ 40/41/48/66/71/77/78/79
- · 4G: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/ 38/39/40/41/42/43/48/66/71
- 3G: B1/B2/B4/B5/B8/B19
- · 2G: 900/1800/850/1900

Supports private networking (LTE/5G) Support CBRS (US B48, Private LTE)

Support 5G mmWave n257/258/260/261 (Optional)

GPS

(Only on WWAN SKUs)

GPS, GLONASS, Galileo, BeiDou, QZSS Dual-Band **GNSS**

· concurrent L1/G1/E1/B1 (GPS/QZSS, GLO, GAL, BeiDou) + L5/E5a/BDSB2a (GPS/QZSS, GAL, BeiDou); a-GPS; supports XTRA

WIRELESS LAN

Radio

IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2×2 Mu-MIMO; Wi-Fi™ 6E (801.11ax);

Wi-Fi certified; Wi-Fi™ 6E Certified; Dual Band Simultaneous; IPv4, IPv6

Data Rates

6GHz: 802.11ax - 20MHz, 40MHz, 80MHz, 160MHz up to 2402 Mbps;

5GHz: 802.11a/n/ac/ax — 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps;

2.4GHz: 802.11b/g/n/ax — 20MHz up to 286.8 Mbps

Security and Encryption

WEP (40 or 104 bit);

WPA/WPA2 Personal (TKIP, and AES);

WPA3 Personal (SAE);

WPA/WPA2 Enterprise (TKIP and AES);

WPA3 Enterprise (AES) — EAP-TTLS (PAP, MSCHAP,

EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP, EAP-PWD; TC78 WWAN models only EAP-SIM, EAP-AKA; WPA3 Enterprise 192-bit mode (GCMP 256) — EAP-TLS; Enhanced Open (OWE)

WIRELESS PAN

Bluetooth

Class 2, Bluetooth v5.2 and Secondary BLE for beaconing within BLE battery

WIRED LAN

Ethernet

Support (w/ Ethernet Cradle - 1GHz)

^{*}Android version is subject to change depending upon Qualcomm's roadmap.

^{*}Please be informed that Bluebird warranty program should be purchased to get Android upgrade service.



Specifications (Continued)

COMMUNICATION AND MESSAGING

VoIP / PTT

DATA CAPTURE

Scanning	SE4770 1D/2D Scan Engine SE4720 1D/2D Scan Engine (Optional) SE55 1D/2D Advanced Range Scan Engine (Optional)
Camera	Rear – 16 MP AutoFocus; flash LED, PDAF, Torch mode+HDR; better low light performance; Time of Flight (ToF) Sensor (Optional) Front – 8MP Fixed focus
	(Optional) Rear: 50 MP autofocus; flash LED, PDAF; Torch mode+HDR; Optical image stabilization (OIS)
NFC	ISO 14443 Type A and B; ISO 15693 and FeliCa cards; P2P mode and Card Emulation via Host; ECP1.0 and ECP2.0 polling support, Contactless payment support, Google Smart Tap Ready, Apple VAS certified

SENSOR

Light Sensor	Ambient Light Automatically adjusts display backlight brightness
Other Sensors	Proximity, eCompass, accelerometer. Gyroscope, Pressure

USER ENVIRONMENT

Operating Temp	-20°C to 50°C / -4°F to 122°F
Storage Temp	-40°C to +70°C / -40°F to +158°F
Humidity	5% to 95% non-condensing
Drop Spec	Multiple 10 ft./3.05 m drops to concrete at room tem per MIL-STD 810H
	Multiple 8 ft./2.4 m drops to concrete over operating temp -20°C to 50°C per MIL-STD 810H
Tumble Spec	2000 3.3 ft./1.0 m tumbles, meets or exceeds IEC tumble specification
Sealing	IP68 and IP65 with battery per applicable IEC sealing specifications
Vibration	4 g's PK Sine (5 Hz to 2 kHz); 0.04g2/Hz Random (20 Hz to 2 kHz); 60 minute duration per axis, 3 axis
Thermal Shock	-40°C to 70°C / -40°F to 158°F rapid transition
Electrostatic Discharge (ESD)	+/-15kv air discharge +/-8kc direct discharge +/-8kv indirect discharge

SOFTWARE SOLUTIONS

BOS™	 Provisioning; Staging; Kiosk; Virtual Key; BOS™ Keyboard; VoIP; PTT; PTT Essential EMM; Wi-Fine (WIFI analyze application) Secure ID (Secure management solution)
3'rd Party Solutions Integration	EMM: Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT

 $[\]ensuremath{^{\star}}\xspace$ Specifications are subject to change upon manufacturer's condition.

