# A TSC Company

# 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

### 3'rd Party Solutions Integration

- -EMM: Airwatch, MobileIron, Mobicontrol, IBM Mass360, XenMobile
- -PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT, RealTalk

▶ Meet the all-new next generation rugged device, Bluebird's S70 to experience brilliant specifications, which is the another level upgrade of the previous Bluebird device features. Due to the rugged design of S70, it has better durability than non-rugged devices with better features. Blue buttons on the sides of S70 makes the device to be more visible, and various cutting edge technologies are in S70 camera, PTT key, display, etc.

# **Key Features**

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

## **Fast and Stable Network**

Experience fast business progress speed with Wi-Fi 6E & 5G. Even you are working in the large facilities, you can give fast and stable performance by CBRS private LTE networks.

## **Robust & Slim Design**

S70 has the improved durability and ergonomic design and which makes it thinner, larger & stronger. If you drop it from a height of 3.05m / 10ft or drop it 2,000 times from a height of 1.0m / 3.3ft, it still works. It applied Gorilla Glass on the Touch Pannel and Imager.

#### Speed upgrade of another level

Increase the efficiency of your work by Qualcomm® 6490 octa-core processor, up to 8GB of RAM and 128GB of Flash, plus a 2TB MicroSD card slot.

# 6-inch display with best in class outdoor readability

S70 is waterproof & dustproof, and the screen provides clear display view under the bright sunlight. Bluebird's multi-touch technology applies glove and stylus touch.



# **Key Features**

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

## **Cutting edge Battery technology**

Bluebird's BOS™ Power Manager standard 5000 mAh and extended 7000 mAh batteries offer great power supply and long device working hour. S70 has the best battery capacity of the grade.

# Scan your data with 2 kind of scanning range

If you want to scan in standard range, you can use SE4770/SE4720(Optional) 1D/2D scan engine or SE55 1D/2D scan engine for advanced scan range.

### **High Solution Camera**

Experience a 16 MP integrated camera that delivers high-quality pictures with remarkable clarity.

# Supportive microphone and speaker

3 microphones and 2 speakers improve your communication with co-workers.

# CONVENIENT CONNECTION & COMMUNICATION

# Location-Free Two-Way Communication

If you use BOS™ PTT, a subscriptiontype Push-to-Talk (PTT) Essential service, you can communicate regardless of location. BOS™ PTT helps you send and receive calls and messages over a WiFi network.

# Simply check your boxes by pressing a button

S70 supports Time of Flight(ToF) sensor to check parcel dimensions quickly and easily to save your working time.

# World Class RFID Reader Connection Available

The RFR900, a world-class handheld UHF RFID reader, and the next-generation model, RFR901, enable fast and safe operation. RFR900 can read 900 tags per second and RFR901 can read 1200 tags per second. If you connect Bluebird's adapter mount, Bluetooth, and NFC and use Wi-Fi-6e, you can reliably manage data on the reader connected to your mobile computer.

## MANAGE YOUR WORK EFFICIENCY BY BOS™ OF Bluebird

## Reliable Security system

BOS™ SecureCare for Android™ can protect your devices safely. With Bos Kiosk, you can restrain apps and device features.

## Manage your device easily

With Bluebird Zero-Touch, you can manage many devices just by scanning. BOS Wi-Fine manage Wi-Fi connection stable. Use Non-GMS OS Control to select Google Services. You can manage the device by BOS Dr.Device without repairing it.

# Easy application performance and data management

You can use the BOS SDK, a custom development tool for enterprise applications. This enables rapid application development and provides a custom toolkit that is fast, efficient, and optimized. You can also easily manage bar code data using the Data Wedge API.

### Simply find your lost device

You can find lost device easily & fast with BOS Device Tracker, even the battery is discharged or off.

# Increase work efficiency with the device

With Terminal Emulation and BOS™ Keyboard, you can get the touchscreen & keybord you need for managing data. BOS onescan can help you select the barcodes, and OCR can help you capture standardized data.



# **Specifications**

#### PERFORMANCE CHARACTERISTICS

Qualcomm Snapdragon™ QC6490 octa-core, 2.7 GHz

Operating System

Android 12;

Upgradeable to Android 16

Memory

CPU

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)

(Optional)

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; Haptick 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

Radio Frequency Band Worldwide

- 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 $^{\rm m}$  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, MSCHAPv2); EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP, EAP-PWD; WWAN models only — EAP-SIM, EAP-AKA; WPA3 Enterprise 192-bit model (GCMP 256) — EAP-TLS: Enterpred Open (CWE)

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)

<sup>\*</sup> Android version is subject to change depending upon Qualcomm's roadmap.

<sup>\*</sup> Please be informed that Bluebird warranty program should be purchased to get Android upgrade service.



# **Specifications (Continued)**

### **COMMUNICATION AND MESSAGING**

VoIP / PTT

### **DATA CAPTURE**

DATA OAL TOKE	
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; FeliCa and ISO 15693 cards; Card Emulation via Host; Contactless payment support,  (Optional) ECP1.0 and ECP2.0 polling support, 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 pe 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™	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

<sup>\*</sup> Specifications are subject to change upon manufacturer's condition.

