



BIO SLED A10

Digital ID & Biometric Reading Device

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Bio Sled A10 is versatile mobile platform for verification and authentication of citizen identity by using state-of-the-art biometric and automatic data capture technologies. It is equipped with multi-modal biometric sensors of fingerprint, dual iris, facial recognition, and thermometer and e-document readers of MRZ, Barcode scanner, contact & contactless smart card, HID iClass and MSR. All functions can co-exist in one device or user can select needed options only. Built-in 6700mAH battery ensures all-day long operation. Bio Sled A10 is compatible with various Samsung Galaxy series smartphones, Tab and iPhone which provide customers with a great deal of flexibility in selecting base device and changing in the future in accordance with budget and application. Bio Sled A10 is IP54 sealed and 1.2m drop-resistant to endure outdoor work environment. Bio Sled A10 will certainly streamline mobile operations of access control, workforce management, air/sea port control, KYC(Know Your Customer) and any applications requiring verification and authentication of individual identity.

BIO SLED A10

Biometric & Biographic Data Capture



✓ All functions are optional (Mix-and-match is available)

Advantage

Compatible with various Android-based Smartphones and Tablet



Advantage

Biometric & Biographic Data Capture

All functions can co-exist in one device and are optional (Mix-and-match is available)



Fingerprint
FAP20/30/45



Dual Iris Reader



Facial Recognition Camera



Contact Smartcard
Reader



Contactless Smartcard
Reader



HID Dual frequency
RFID Reader



6700mA Battery
Charge to Smartphones



MRZ(OCR)



1D/2D Barcode Scanner



MSR



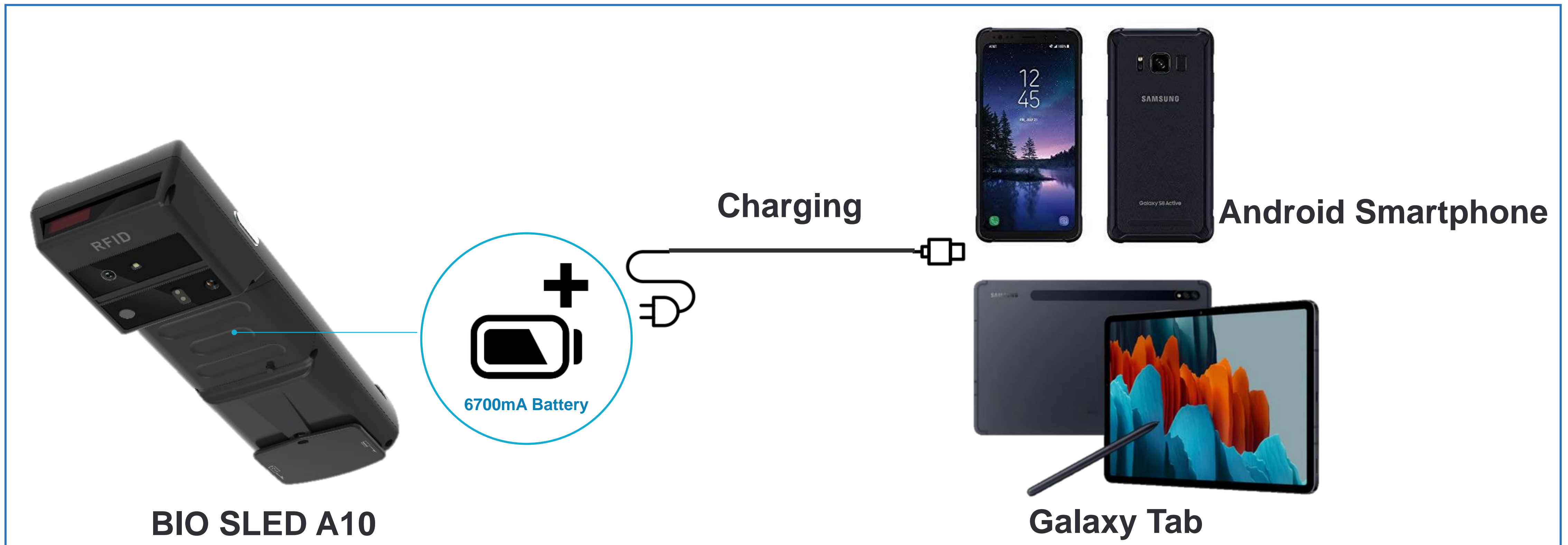
Medical-Grade
Thermometer




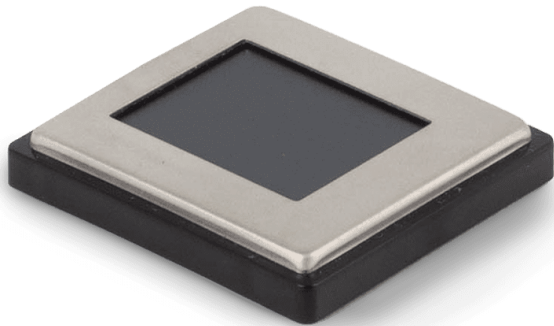
Advantage

High capacity battery (6,700mAh)

*A10's high capacity battery can charge smartphone.
It ensures full-shift heavy duty operation without charging.*



Fingerprint Modules (optional)

	SUPREMA BM SLIM2 (FAP20)	IB DANNOO (FAP30)	IB SHERLOCK (FAP45)
Image			
Type	Optical Sensor	LES (Light Emitting Sensor)	LES (Light Emitting Sensor)
Type of fingerprints collected	1 finger flat	1 finger flat	2 fingers flat (1 finger rolls)
Resolution	500ppi	500ppi	500ppi
Certification	FBI PIV 071006 FIPS 201	FBI PIV071006 FIPS 201	FBI Appendix F FIPS 201
Image Capture Area (WxH inches)	0.6 x 0.8	0.8 x 1.0	1.6 x 1.5

Design View

BIO SLED A10



Specification

Data Capture	
Fingerprint	IB DANNO FAP30 TFT PIV Certified (Suprema FAP20, IB Sherlock FAP45 : Optional) Sensor : Light-emitting sensor (LES) TFT camera Resolution / Gray Scale : 500 ppi / 256 grayscale Imager Size / Speed : 400 x 500 pixels / > 10 FPS
Dual Iris Scanner	Sensor : 5MP B&W CMOS sensor Range / Resolution : 320±40mm / Above 160 pixel/cm Illumination / Image : IR LED / 2592 x 920 x 30 frame
Camera	13MP auto focus with LED flash / controlled by Gen2wave SDK Optimized for photo and video shooting, facial recognition
Contact Smart Card Reader	Contact type smart card reader : ISO 7816 compliant
NFC	ISO 14443A/B part 1-4 Mifare Classic Optimized for e-Passport and eID card RFID chip reading 1 SAM slot
HID RFID Reader	HID OMNIKEY 13.56 MHz HF / 125 KHz LF RFID HF Transmit Frequency 13.56 MHz +/- 50 ppm Smart Card Technologies: ISO14443A/B ISO15693, FeliCa™ (IDm), CEPAS (CSN)
MRZ (OCR)	ID1, ID2 and ID3 document type ID cards, Passports, visas, Driver's Licenses ICAO 9303, ISO/IEC 7501-1, ISO 18013-3
Barcode Scanner	High performance 1D/2D Imager
MSR	Reads magnetic cards complying with ISO7811/2-5
Thermometer	High precision non-contact temperature measurements Ideal distance is around 3cm (1.2inch) High accuracy of 0.5°C (32.9°F) in a wide temperature range Measurement resolution of 0.02°C (32°F)

General Characteristics	
Compatible Devices	Android smartphones and Galaxy Tab Galaxy Tab and Fingerprint module can not be used at the same time.
Battery	6700mAH Li-Polymer
Dimensions	80mm(W)x 230mm(L)x 45mm maximum thickness / 28mm(D) minimum thickness 3.1 inch (W) x 9.0 inch (L) x 1.7inch / 1.1inch (D)
Weight	430g (15 oz) All technologies included
Buttons	3 buttons on the A10 sides. (2 programmable keys / One power key)
LED	2 LED : charging / power status
Smartphone Connect	USB Type C (male)
Smartphone Positioning	Otterbox uniVERSE / Custom case with slot and slide
Connection	USB Type C (female) for charger connection and for connecting to other equipment
Communication	C type USB host / client
Charging	High-speed charging : 5~12V, 1.5A (Smartphone & A10) Qualcomm quick charge 3.0 supported When the A10 is off, : A10's battery support (charge) smartphones : Smartphones and A10 can be charged simultaneously
User Environment	
Operating Temp	-20°C ~ 60°C (-4°F ~ 140°F)
Storage Temp	-30°C ~ 70°C (-22°F ~ 158°F)
Humidity	Non-condensing, 93%
Drop & IP sealing	1.2m (w/o smartphone) , IP54 (w/ cover to smartcard reader)
Supported Software	
Smartphone OS	Android 9.0 or higher
Development Tools	Android studio, Eclipse
Development SDK	With Java SDK : Barcode scanner, MRZ, MSR, Fingerprint, Smart card, Iris, RFID, Temperature Measurement, Camera

Digital ID & Biometrics Technology

Fingerprint Sensor			
Model	Suprema BM-Slim 2	IB Danno	IB SHERLOCK
FAP	FAP20	FAP30	FAP45
Sensor Type	Optical Sensor	LES (Light Emitting Sensor)	LES (Light Emitting Sensor)
Image Capture Area (WxH inches)	0.6 x 0.8	0.8 x 1.0	1.6 x 1.5
Types of fingerprints collected	1 finger flat	1 finger flat	2 fingers flat (1 finger rolls)
Certification	FBI PIV 071006 , FIPS 201	FBI PIV 071006, FIPS 201, Certified to Mobile ID Requirements	FBI Appendix F, GSA FIPS 201, Mobile ID IQS FAP45
Pixel Resolution / Gray Scale	500ppi / 256 grayscale	500ppi / 256 grayscale	500ppi / 256 grayscale
Operating temperature	-10°C ~ +50°C	-10°C ~ +55°C	-10°C ~ +55°C
Storage Temperature		-40°C ~ +80°C	-40°C ~ +80°C
IP sealing	IP65	IP65	IP65

OCR (MRZ Reader)	
Model	OCR310e
Standard OCR Fonts	OCR-B and E13B
Machine Readable Passports (MRP)	2 lines of 44 characters
Machine Readable Visas (MRV)	2 lines of 44 characters, 2 line of 36 characters
Travel Documents	2 lines of 36 characters, 3 line of 30 characters
ID Document	1 line of 30 characters, 2 lines of 36 characters, 3 lines of 30 characters
MRZ stripe speed	up to 100cm/sec
OCR decoding	up to 0.3 second Field of view object height: 19.6 mm nominal
Field of View Object Height	19.6 mm nominal
Depth of Field	1.5 mm maximum from imager window
MSR (Magnetic Stripe Card Reader)	
Model	MH1637A
Magnetic stripe Reader	Reads magnetic cards complying with ISO7811/2-5

Iris Scanner (Dual)	
Model	Iris ID OUM100-MI (J2C : optional)
Camera	5MP B&W CMOS sensor
Operating Range	350±30 mm (12.2"~15.3")
Resolution	Above 160 pixel/cm
Iris Capture Volume	130mm x 46mm x 80mm
Illumination	IR LED
Image	2592 x 920 x 30 Frame
Dimension	56mm(W) x 21mm(H) x 10mm(D)
RFID Reader (G2W proprietary RFID Reader Specialized for eID & e-Passport)	
Model	G2W
Operating Frequency	HF, 13.56MHz
RF protocols	ISO/IEC 14443A/B part 1-4 MIFARE Classic Optimized for e-Passport and eID card RFID chip
SAM Slot	1 SAM Slot

Application

Law Enforcement & Public Services



Secure Access Control



Benefit Delivery



Delivery of pension, check, credit card and cash

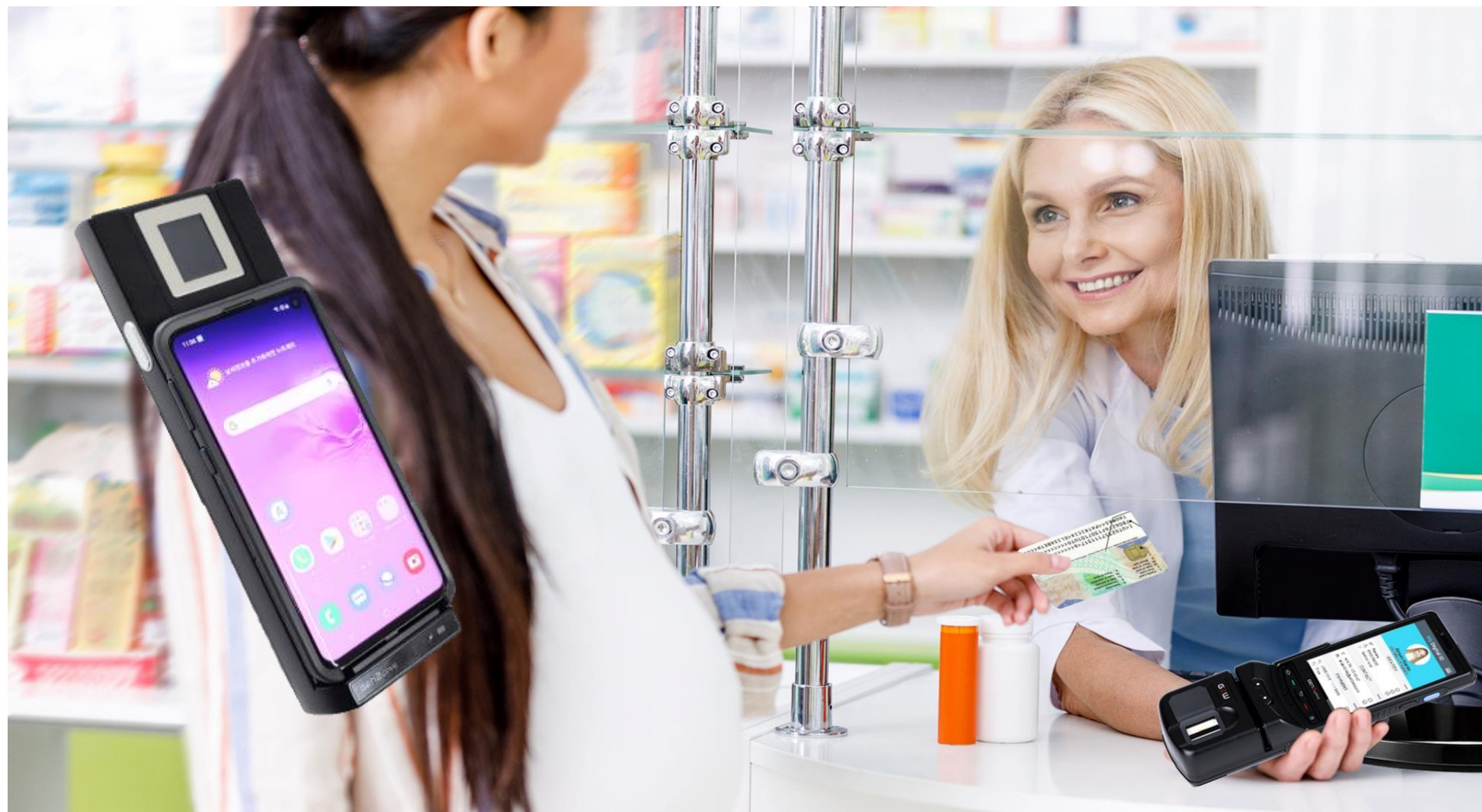
Border Control



Jail Management



Compulsory ID Registration in Pharmacy, Phone shop



Voting and Ballot Box



eKYC



Thank You

G e n 2 W a v e C o . , L t d
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S e o n g n a m - s i ,
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S a l e s I n f o : E m a i l . i n f o @ g e n 2 w a v e . c o m
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