





# SOCKETSCAN S550 CONTACTLESS MEMBERSHIP CARD READER/WRITER

The SocketScan S550, a contactless membership card reader/writer, is designed to facilitate tap-and-go smart card and NFC applications. It combines the latest 13.56 MHz contactless technology with Bluetooth LE connectivity.

The S550 was created to work with loyalty cards, memberships, and other customer-related services with applications. Together with an application, the S550 can automatically request the appropriate mobile pass from an iOS or Android host device for a franchise, store or event you are attending to ensure a fast and convenient end-user experience. The S550 with an application creates a simple user interaction and a high level of security by capturing a cryptographically generated payload from the mobile pass. The mobile pass then transmits the payload over secure Bluetooth to an iPad or other host device running a connected application.

Ideal for applications with a broad range of solutions, such as hands-free verification for physical and logical access control and inventory tracking. The S550 supports three Bluetooth profiles: 1). HID Keyboard Emulation (for native app support), 2). Reader (default mode) and 3). Coupler Reader/Writer (the latter two for customer app development using our Capture SDK).

The S550 is compact and portable and can be plugged into power or run on battery power. Convenient for use anytime, anywhere with applications running on Android, Apple iOS devices (iPad®, iPhone®, iPod touch®) and Windows. The S550 can be used with applications that support ISO 14443 Type A and B smart cards, ISO 15693 tags, MIFARE®, FeliCa®, NPX, STMicro tag and most NFC tags and devices compliant with ISO 18092 standard. It is Google Wallet certified and Apple Pay "VAS" (Value Added Service) certified. Complies with both Apple and Google NFC protocol on iPhone and Android devices.



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#### **Features**

- · Works with supported applications over Bluetooth LE in iOS, Android and Windows Bluetooth-enabled devices
- Meets Accessory Design Guidelines for Apple devices (Release R7) Compliant with Android, and Windows product recommendations.
- Reading Reads Apple Wallet & Google Wallet Passes, Fast NFC and RFID Reader (HF tags, labels, smart devices).
- Writing Write/Encode, lock, unlock tags.
- · Long Lasting Battery Power to lasts a full shift.
- Reader Mode Templates reader and HID mode for popular tag types. Customizable with an application over BLE
- **User Feedback** Intuitive LED indicators and melodies let users monitor battery, Bluetooth connection and scanning status at a glance.
- **Keyboard Emulation** The combination of the S550 (reader mode) and Socket Mobile Keyboard provides HID equivalent supposed for use in any app or web form. Fast, reliable with full error checking
- **HID Basic Mode** emulates a keyboard and delivers the data to the active cursor location. No software installation required.
- **Application Mode** Along with Socket Mobile's Capture SDK enables easy integration in your applications to unite the S550 into your ecosystem.
- **Sample App** Socket Mobile Nice2CU application, available via Apple app store and GitHub, is a simple membership check-in/ checkout app demonstrating the power and potential capabilities of the solution.
- Wireless (Bluetooth) connectivity with iOS, Android and Windows devices with long-range Bluetooth connection up to 330 feet (100m)
- Easy Updates Firmware can be updated over Bluetooth using an iOS or Android app.
- · Developer Support Available
- 1-Year Warranty

#### **SINGLE PACKAGE INCLUDES**

(1) S550, Contactless Membership Card Reader/Writer

(1) USB Charging Cable

#### **Bonus Accessories**

- (1) Active Surface
- (1) Tap Here Sticker
- (1) NFC Test Card
- (1) Security Cable



The S550 is available in 2 colors: White - TX3489-1984 Black - TX3867-2902

#### **READING PERFORMANCE**

NFC Tags ISO15693: Vicinity Card

Supported: ISO/IEC 14443 A and B: Mifare, Sony FeliCA

Compliant with EPC GEN 2 HF and ISO 18000-3 mode 3

ISO 18000-3 mode 3: EPC GEN 2 HF

NFC: ISO/IEC 18092 Proprietary: Several Peer-to-Peer (P2P) Card Emulation

Write Mode Write mode is supported using the PCSC protocol over BLE. Compatibility is subject to the

card type, content and authentication level. Please, contact Socket Mobile at support@

socketmobile.com to discuss your requirements.

Maximum NFC Read

Range:

0.4" - 2" (10 - 50 mm)

#### NFC READER TYPE

NFC front-end: NXP PN5180

Carrier frequency: 13.56 MHz (RFID HF, NFC)

Read/Write Speed: 26 kbps (ISO 15693), 106kbps (ISO 14443, 212/424kbps (ISO 18092)

Antenna: Integrated, Round 54mm x 40mm, balanced

### **BLUETOOTH (WIRELESS CONNECTION) 8**

Bluetooth Radio: Bluetooth, version 5

Bluetooth Range: Up to 100 m (330 ft.) depending on environment, range limit is usually due to the Host Device

(phone, tablet or notebook)

Bluetooth Connection: "Keyboard"- Keyboard Emulation Profile

"Reader" - Reader Only Profile (default)

"Coupler" - Reader/Writer Profile (advanced user)

#### **USER ENVIRONMENT**

Operating -20° to 50° C (-4° to 122° F) (Plugged into power)
Temperature: 0° to 38° C (32° to 100° F) (Battery Powered)

Storage Temperature: -40° to 70° C (-40° to 158° F)

Relative Humidity: 95% at 60° C (140° F) (non-condensing)

# POWER/BATTERY

Power Plug:	USB A Male to DC Plug (1.5 meters cable)
Charge Time:	4 Hours
Battery Life - Per Full Charge:	Standby time: 16 hours Active Operation: 2,400 reads
Type of Battery	Lithium Ion Polymer
Number of Batteries Used	1
Weight of battery	35g
Percentage Lithium	26.5%
Battery mAh	1000 mAh
Number of cells per battery	1
Watt Hours per battery	3.7
Type of Cell (ex. AA)	Proprietary
Chemical Composition( ex. Alkaline)	*Lithium - polymer
Lithium Content	3.0g
Battery Voltage	3.7v
Hazmat UN Number	UN3481, P.I. 967
ROHS Compliance Indicator	Yes, included with S550
Country of Origin	China
Commodity Code	8507.60.0000
Note:	Battery life varies depending on ambient temperature, read attempts, and age of battery.

# PHYSICAL CHARACTERISTICS

Dimensions:	2(D) x 1.5 (H) in (50.8 mm x 63.5 mm)
Weight/Mass:	2.6 oz. (74g)
LEDs:	Four Quadrant LED Circle (full RGB) that meets the EMV "Common User Interface Guidelines" and provides intuitive feedback to the cardholder during normal operation and also can be used to simplify setup and status.
Button:	Power Button: On/Off
Power Connector:	USB A Male to DC Plug Charging Cable 1.5 meters (4.9 feet)

## **OPERATING SYSTEM SUPPORT**

Android OS	Windows 10
Apple iOS	All devices supports: Keyboard Emulation Profile, Reader Only Profile and Reader/Writer Profile









#### **CERTIFICATION & REGULATORY**

Bluetooth SIG: Declaration ID: D048240

Electrical Safety: FCC ID: Certified to IEC 60950-1, UL 60950-1, CAN/CSA C22.2

Environmental: Environmental: RoHS EN 50581

EMI / RFI: FCC Part 15 Class C, RSS 210, iCES 003, CISPR 22, CE EN55022, EN55024

















#### **WARRANTY**

Reader: Standard one year limited warranty

Accessories: 90 days

Extended Warranty: www.socketmobile.com/socketcare

(sold separately)



#### **COMMON USES**

Retail/Point of Sale - loyalty Office use - Access control Check in/Check out

Healthcare - Read ID Badges Authentication Loyalty Identity (PIN)

Events - Hospitality, access control, attendants

ocketmobile.com

+1 510 933 3000

North America: +1 800 552 330

France: +33 970 462 241

sales@socketmobile.com

Asia Pacific: +1 510 933 31:

ermany: +41 62 834 07 8

ales-japan@socketmobile.com

Japan: +8190 9808 0518

Japan IoII-Free: +81 (800) 91903

atin America: +1-510-933-3153

/Ireland/South Africa: +44 (800) 048736

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