

Android SDK

Release Notes

RFID SDK
Ver. 1.15.01



Copyright

Copyright 2017. Aplusetech Co., Ltd. All rights reserved.

Apulsetech is the manufacturer of Apulsetech RFID handheld computers.

This document and related software in this device are protected by international copyright laws.

Any part of this document may not be reproduced, removed or used in any form by any means, without permission in writing from Apulsetech.

The contents in this manual is subject to change without prior notice.

Apulsetech and α811 are registered trademarks of Apulsetech Co., Ltd., all other trademarks and copyrights are property of their respective owners.

The software is provided for user understanding how to use the device and application development. All software, including firmware, is on a licensed basis.

No right to copy a licensed program in whole or in part is granted, to other device except as permitted under copyright law.

Apulsetech Co., Ltd.

C-1211, 60, Haan-ro,
Gwangmyeong-si,
Gyeonggi-do,
Republic of Korea

<http://www.apulsetech.com>

Revision History

Change	Date	Description
Ver.1.04.00	2017/11/02	1 st Release
Ver.1.05.00	2017/11/10	SDK v1.05.00 Release
Ver.1.09.00	2018/03/09	SDK v1.09.00 Release
Ver.1.11.00	2018/05/07	SDK v1.11.00 Release
Ver.1.13.00	2018/07/30	SDK v1.13.00 Release
Ver.1.13.01	2018/08/22	SDK v1.13.01 Release
Ver.1.13.02	2018/09/10	SDK v1.13.02 Release
Ver.1.13.03	2018/10/01	SDK v1.13.03 Release
Ver.1.14.00	2018/11/08	SDK v1.14.00 Release
Ver.1.15.00	2018/12/26	SDK v1.15.00 Release
Ver.1.15.01	2019/01/14	SDK v1.15.01 Release

Table of Contents

1.	Requirements	5
■	Supported Operating Systems.....	5
■	Supported Hardware	5
■	Supported IDE Environments.....	5
2.	Release History.....	6
■	V1.15.01.....	6
■	V1.15.00.....	6
■	V1.14.00.....	7
■	V1.13.03.....	8
■	V1.13.02.....	8
■	V1.13.01.....	9
■	V1.13.00.....	9
■	V1.11.00.....	9
■	V1.09.00.....	9
■	V1.05.00.....	10
■	V1.04.00.....	10
3.	Customer Support	11
1)	Technical Support.....	11
2)	Feedback.....	11

1. Requirements

■ Supported Operating Systems

The requirements for APULSETECH Android SDK are as shown below.

- ① Windows 7/8/10 or newer recommended
- ② Ubuntu Linux 14.04 or newer recommended
- ③ OSX

■ Supported Hardware

- ① α811 handheld reader

■ Supported IDE Environments.

- ① Eclipse Neon for Android Application Developers with Android SDK
- ② Android Studio 3.0 or newer recommended

2. Release History

For details about the changes in each release, please refer to the summary of version history.

■ V1.15.01

New Features

Issue Fixes

- Improved multi connection handling of BLE remote connection.
- Improved error handling of remote connection.
- Improved touch control of expand and collapse for operation setting regions in demo app.

■ V1.15.00

New Features

- Added heartbeat packet ping and timeout handling for remote connection.
- Added excel export for barcode and tag data.
- Added multi language support for demo apps.
 - Currently supported languages
English, Korean, Chinese, Japanese.
 - Remaining resources of barcode symbology configuration will be translated in the future release.
- Support additional remote connection interfaces.
 - Supported interfaces for remote connection, refer to below table.

		Remote Manager	Client OS		
			Android	Windows	iOS
Serial		O	X	O	X
USB to Serial		O	O ¹	O	X
USB	Remote	To be supported ³	To be supported ³	To be supported ³	X
	HID	To be supported ⁴	To be supported ⁴	To be supported ⁴	X
Bluetooth	BLE	O	O	To be supported ²	To be supported
	SPP(Socket)	O	O	O	X
WiFi	Socket	O	O	O	To be supported
	P2P(Direct) + Socket	O	△ Search only. Connection to be supported	O	X

* Remark

1. Supported cables, refer to below table.
2. Compatibility problem of BLE connection control between Android and Windows.
3. Available after the device driver is supported.

- Multiple connection support for device scan and query¹.

		Multiple clients → Device	Multiple devices → Client
Serial		X ²	X ²
USB to Serial		X ²	X ²
Native USB		X ²	X ²
Bluetooth	BLE	O	O

	SPP(Socket)	O	O
	Socket	O	O
WiFi	P2P(Direct) + Socket	O	O

* Remark

1. Multiple connection is only available for device scan and query.
The multiple connections to function modules including barcode and RFID are not allowed.
2. Single connection only due to its H/W interface limitation.

- Supported baud rates for USB to Serial interface, refer to below table.

	Supported chip	Supported bps
FTDI	FT231X series	TBD
	FT232R	TBD
Silicon Labs	CP210X series	TBD
Prolific	PL2303	115200, 230400, 460800, 921600
QinHeng	CH340	TBD

Issue Fixes

- Improved error control of remote connection.
- Changed the default timeout value of remote connection to 40s same as heartbeat.
→ In remote scanner settings, select and test proper timeout value.
- Improved big data processing performance of demo apps.
- Applied miscellaneous bug fixes and improvements.

■ V1.14.00

New Features

- Added Fujitsu tag support.
- Support extra inventory information including phase, channel and Monza M4 FastID.
- Support library level filtering for inventory data.
- Support remaining data loading from remote device.
- Demo app can display extra inventory information including phase, channel and Monza M4 FastID.
- Added sound volume control support.
- Added loading screen for initialization in demo app.
- Setting region can be hidden or shown by demand in demo app.
- Added data sort support in demo app.
- HID demo also supports remote connection with clipboard copy/paste.
- Added HID clipboard demo app.
- Support additional remote connection interfaces.

- Supported interfaces for remote connection, refer to below table.

		Remote Manager	Client OS		
			Android	Windows	iOS
Serial		O	X	O	X
USB to Serial		To be supported	O ¹	O	X
Bluetooth	BLE	O	O	To be supported	To be supported
	SPP(Socket)	O	O	To be supported	X
	Socket	O	O	To be supported	To be supported
WiFi	P2P(Direct) + Socket	O	△ Search only. Connection	To be supported	X

			to be supported		
--	--	--	-----------------	--	--

* Remark

1. Supported cables, refer to below table.

- multiple connection support for device scan and query¹.

		Multiple clients → Device	Multiple devices → Client
Serial		X ²	X ²
USB to Serial		X ²	X ²
Bluetooth	BLE	Δ Supported. But needs improvements.	O
	SPP(Socket)	To be supported	O
WiFi	Socket	To be supported	O
	P2P(Direct) + Socket	X	Δ Search only. Connection to be supported.

* Remark

1. Multiple connection is only available for device scan and query.
The multiple connections to function modules including barcode and RFID are not allowed.
2. Single connection only due to its H/W interface limitation.

- Supported baud rates for USB to Serial interface, refer to below table.

	Supported chip	Supported bps
FTDI	FT231X series	TBD
	FT232R	TBD
Silicon Labs	CP210X series	TBD
Prolific	PL2303	115200, 230400, 460800, 921600
QinHeng	CH340	TBD

Issue Fixes

- Resolved the sensor data refresh issue in sensor tag inventory screen.
- Improved error control of remote connection.
- Improved search and connection stability of remote device.
- Fixed binding leaks of HID services.
- Revised sensor data display for RFMicron Magunus S1 and S2 sensor tags.
- Applied miscellaneous bug fixes and improvements.

■ V1.13.03

New Features

- Added RFMicron sensor tag support.
- Added RFMicron sensor tag support in demo app.

Issue Fixes

- Fixed packet parsing errors.

■ V1.13.02

New Features

Issue Fixes

- Added force reset before connecting rfid module.
- Adjusted max RF power from 33dBm to 30dBm.
- Added high baudrate support for module serial connection (**OS v1.03 or higher**).
Before: 115200, 230400
Current: 115200, 230400, **460800, 921600**
- Removed regulatory region information from main screen of demo app.
- Resolved the button link mismatch issue on firmware update dialog.
- Updated audio resources for demo apps.

■ V1.13.01

New Features

Issue Fixes

- Revised BlockPermalock() API.
- Updated Remote Manager app.

■ V1.13.00

New Features

- Added trigger control option to demo app.
- Added multi event listener support.

Issue Fixes

- Improved tab widget UI for easy visibility.
- Fixed NULL channel information issue.
- Revised application parameter condition of selection criteria.
- Added and removed some APIs.
 - Added: isOperationRunning(), stopOperation()
 - Removed: isInventorying(), stopInventory()
- Adjusted response timeout and improved operation abort control
- Revised settings not to be allowed to change while operation is running
- Fixed some crash issues of demo app.
- Resolved a remote response parsing error.

■ V1.11.00

New Features

- Added remote device connection support through serial, BLE and WiFi for RFID reader.

Issue Fixes

- Fixed serial reconnection fail issue while changing baudrate.
- Improved handling of some GUI widget controls in demo apps.
- Added extra improvements and fixes.

■ V1.09.00

New Features

- Added some new APIs.

isInventorying(), getAccessTimeout(), setAccessTimeout(), getRegulatoryRegion(), getInventorySelectionTarget(), setInventorySelectionTarget(), getBaudrate(), setBaudrate()

- Added InvSelectionTarget, Selection constants.
- Renewed demo apps.

Issue Fixes

- Resolved wrong regulatory region display issue.
- Resolved some operating issues related to execution time.
- Renamed some APIs

■ V1.05.00

New Features

Issue Fixes

- Changed some RFID global index order as shown below.

Before	After
...	...
AUSTRALIA = 3	CHINA = 3
BANGLADESH = 4	BANGLADESH = 4
BRAZIL = 5	BRAZIL = 5
BRUNEI = 6	BRUNEI = 6
CHINA = 7	AUSTRALIA = 7
HONGKONG = 8	JAPAN_1 = 8
INDIA = 9	JAPAN_2 = 9
INDONESIA = 10	HONGKONG = 10
IRAN = 11	INDIA = 11
ISRAEL = 12	INDONESIA = 12
JAPAN_1 = 13	IRAN = 13
JAPAN_2 = 14	ISRAEL = 14
...	...

■ V1.04.00

New Features

- First release.

Issue Fixes

3. Customer Support

1) Technical Support

Please visit APULSETECH website for technical support. You can report your issues and get its answers. Also, you can get all the latest information and updates for products and its software.

2) Feedback

Please send us your feedbacks about APULESTECH products.