

Android SDK

Release Notes

RFID/Barcode SDK
Ver. 1.15.01



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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 |

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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 LTS 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

[Barcode]

[RFID]

[Common]

Issue Fixes

[Barcode]

[RFID]

[Common]

- 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

[Barcode]

[RFID]

[Common]

- 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 |
| WiFi | Socket | O | O |
| | 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

[Barcode]

- Updated 2D barcode libraries.

[RFID]

[Common]

- 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

[Barcode]

[RFID]

- 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.

[Common]

- 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 |
| WiFi | Socket | O | O | To be supported | To be supported |
| | P2P(Direct) + Socket | O | △ Search only. Connection to be supported | To be supported | X |

* 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 | △ Supported. But needs improvements. | O |
| | SPP(Socket) | To be supported | O |
| WiFi | Socket | To be supported | O |
| | P2P(Direct) + Socket | X | △ 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

[Barcode]

- Updated 2D barcode libraries.

[RFID]

- Disabled ch.0 in the Korea region.
- Resolved the sensor data refresh issue in sensor tag inventory screen.
- Revised sensor data display for RFMicron Magunus S1 and S2 sensor tags.

[Common]

- Improved error control of remote connection.
- Improved search and connection stability of remote device.
- Fixed binding leaks of HID services.
- Applied miscellaneous bug fixes and improvements.

■ V1.13.03

New Features

[Barcode]

- Added Inverse 1D barcode setting.

[RFID]

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

[Common]

Issue Fixes

[Barcode]

[RFID]

- Fixed packet parsing errors.

[Common]

■ V1.13.02

New Features

[Barcode]

[RFID]

[Common]

Issue Fixes

[Barcode]

[RFID]

- 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.

[Common]

- Updated audio resources for demo apps.

■ V1.13.01

New Features

[Barcode]

[RFID]

[Common]

Issue Fixes

[Barcode]

[RFID]

- Revised BlockPermalock() API.

[Common]

- Updated Remote Manager app.

■ V1.13.00

New Features

[Barcode]

[RFID]

[Common]

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

Issue Fixes

[Barcode]

- Removed vibrator setting option from barcode demo app.

[RFID]

- 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.

[Common]

- 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

[Barcode]

[RFID]

[Common]

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

Issue Fixes

[Barcode]

- Fixed the parameter handling issues of symbology settings.

[RFID]

- Fixed serial reconnection fail issue while changing baudrate.

[Common]

- Improved handling of some GUI widget controls in demo apps.
- Added extra improvements and fixes.

■ V1.09.00

New Features

[Barcode]

- Added handsfree and auto mode support.

[RFID]

- Added some new APIs.
isInventorying(), getAccessTimeout(), setAccessTimeout(), getRegulatoryRegion(), getInventorySelectionTarget(), setInventorySelectionTarget(), getBaudrate(), setBaudrate()
- Added InvSelectionTarget, Selection constants.

[Common]

- Renewed demo apps.

Issue Fixes

[Barcode]

- Fixed random crash issues while executing scanner operations.

[RFID]

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

[Common]

■ 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 |
| ... | ... |

- Resolved the value reset issue of barcode settings which is previously configured.

■ 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.