CipherLab User Guide

RK95 Mobile Computer Cold Chain User Interface Introduction

Version 1.04



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RELEASE NOTES

Version	Date	Notes
1.04	Jan.22 nd , 2021	Update Section 1.4 "Heater Settings: Switch Mode".
		Add new chapter "Switch Mode".
		Add new section "Low Battery" to Chapter 3.
		Update all figures.
1.03	Sep. 15 th , 2020	Section1.4.1 "Automatic": Update the description about "Defrost Sensitivity"
		Section1.4.1 "Automatic": Change the default scan window defrost duration to 3 minutes.
1.02	August 31st, 2020	Add the note about battery replace to Section 1.1: Overview
		Update Chapter 2: Notifications
1.01	August 13 th , 2020	Update figures.
1.00	June 22 nd , 2020	Initial release

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DEFAULT APPLICATION: ENTERPRISE SETTINGS

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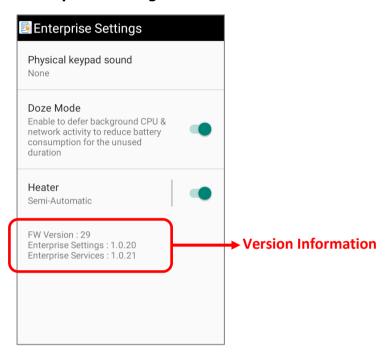
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1.1 OVERVIEW

The default application "Enterprise Settings" helps you to control the physical keypad and the heaters.



To launch "Enterprise Settings", please go to App Drawer (All Apps) and tap on "Enterprise Settings".



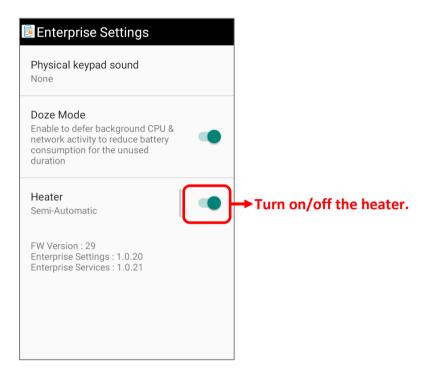
The available functions listed on "Enterprise Settings" main page are:

Item	Description
Physical keypad sound	Setting the physical keypad sound. The default setting is "None".
Doze Mode	"Doze Mode" is enabled by default. Please refer to https://developer.android.com/training/monitoring-device-state/doze-standby for details.
Heater	Monitoring the temperature of the device and the heater.
Version Information	The version information for trouble shooting.

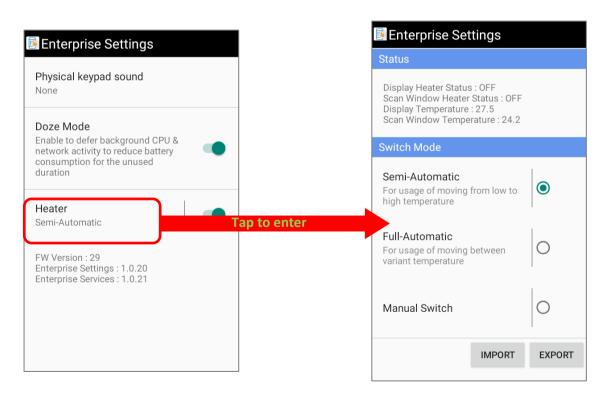
Always use a fully-charged main battery for battery replacement. Note:

1.2 HEATER SETTINGS

"**Heater**" is for monitoring the temperature of the device and the heaters. Please tap on the switch to turn on or off the heaters depends on the real operating environments.

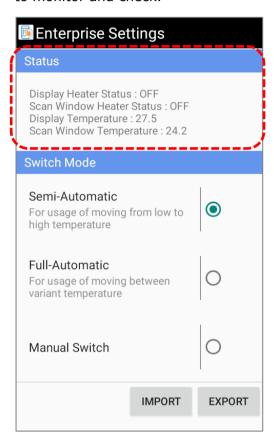


Tap to enter the detail page of "**Heater**" for advanced settings:



1.3 HEATER SETTINGS: STATUS

"**Status**" shows the status of the display heater and the scan window heater for the users to monitor and check.



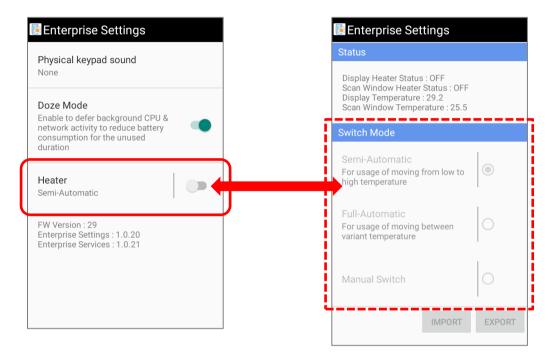
The status information are:

Item	Description
Display Heater Status	Showing whether the display heater is ON or OFF .
Scan Window Heater Status	Showing whether the scan window heater is ON or OFF .
Display Temperature	Showing the current temperature of the display heater. The value is refreshed every 2 seconds.
Scan Window Temperature	Showing the current temperature of the scan window heater. The value is refreshed every 2 seconds.

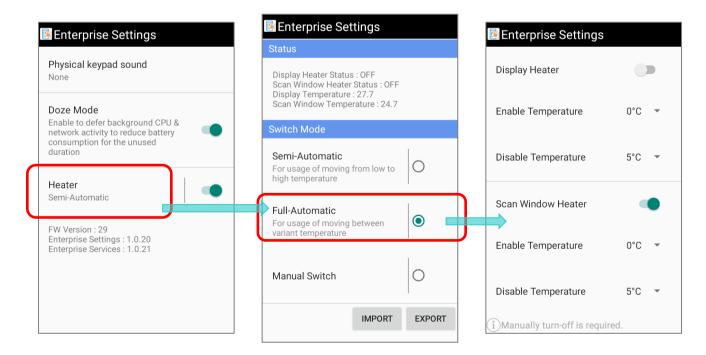
1.4 HEATER SETTINGS: SWITCH MODE

"Switch Mode" allows users to set the switch mode that controls the heaters according to the users' real operating environments. To configure the switch modes, "Heater" must be enabled. Once "Heater" is enabled, users can select the mode from "Semi-Automatic", "Full-Automatic", and "Manual Switch".

"Switch Mode" is unavailable if "Heater" is disabled.



▶ Enable "Heater" to select the switch mode and set the further configuration.

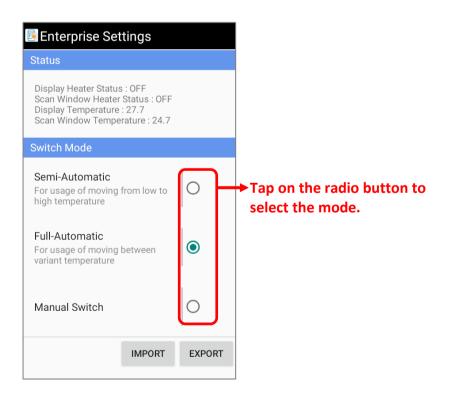


SELECT THE MODE TO BE APPLIED

Please select the switch mode which is applicable to the working environment, and enter the selected switch mode for further settings.

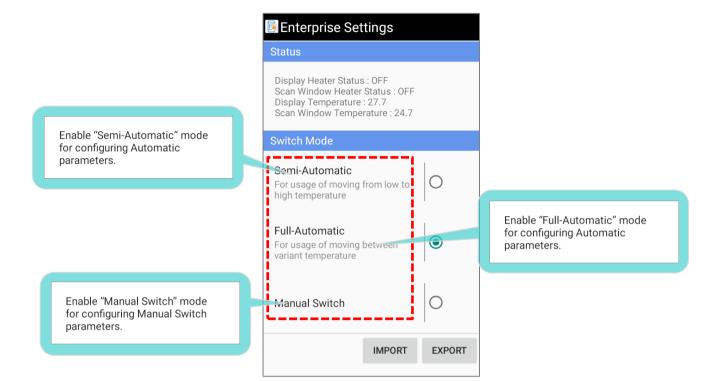
Switch Mode	Description
Semi-Automatic	Heater(s) automatically turns on and off to defrost in response to the temperature change.
Full-Automatic	Heater(s) automatically turns on and off at the designated degree.
Manual Switch	Manually turn on or off the heaters.

To select the mode, please tap on the radio button of the mode to be applied.



For the detailed functions of "Semi-Automatic", "Full-Automatic", and "Manual Switch", please refer to "Switch Mode".

Tap on the mode which is unselected, its brief description shows up.

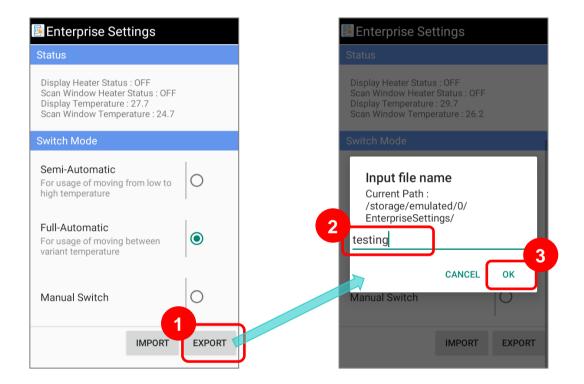


1.5 HEATER SETTINGS: IMPORT & EXPORT

1.5.1. EXPORT

Tap on "**Export**" to save your deployment as a .json file for applying the same settings to other devices or for troubleshooting purpose.

- 1) Tap on "Export".
- 2) Enter the file name and then tap on "OK".

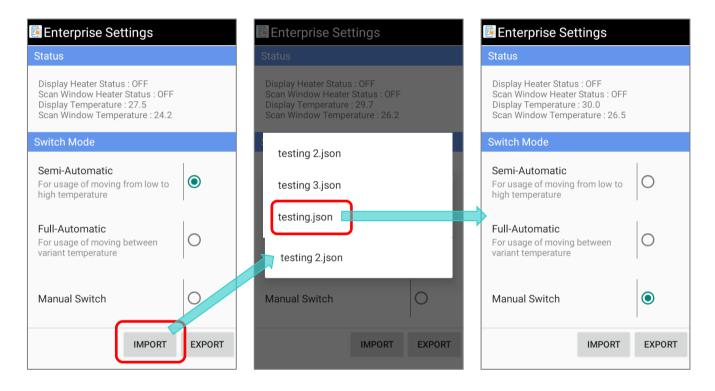


3) The exportation is complete.

1.5.2. IMPORT

"Import" is for applying the deployment to your "Enterprise Settings":

- 1) Tap on "Import".
- 2) Select the .json file you would like to import, and the deployment is applied immediately.



SWITCH MODE

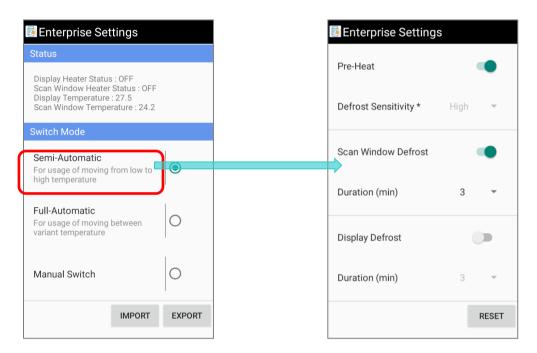
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2.1 SEMI-AUTOMATIC

By enabling "**Semi-Automatic**", the heaters will be automatically turned on and off in the designated period to prevent frosting.

To configure the parameters of "**Semi-Automatic**", please turn "**Semi-Automatic**" on and then tap to enter its detail page.

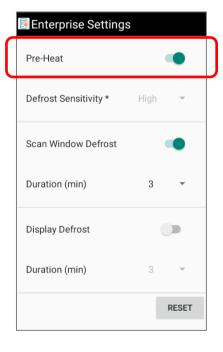


The configurable parameters are:

2.1.1. PRE-HEAT

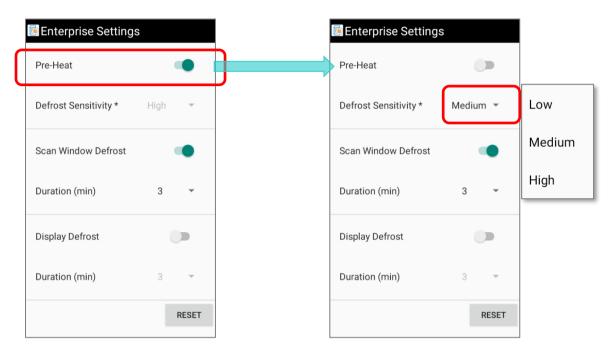
Enable "Pre-heat" mode to shorten the defrost time.

Please note that enabling "**Pre-heat**" mode may slightly reduce the battery life for the display heater stays in the pre-heat stage to keep at a constant temperature till a rise in ambient temperature is detected by the device.

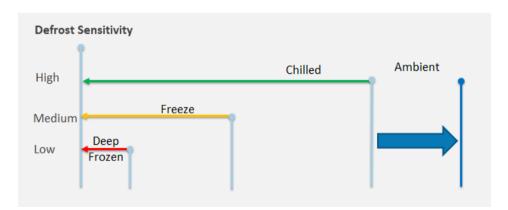


2.1.2. DEFROST SENSITIVITY

"**Defrost Sensitivity**" is inflexible to be "**High**" if "**Pre-heat**" mode is on while it is configurable when "**Pre-heat**" mode is off.



Turn off "Pre-heat" mode and then tap to set the sensitivity by selecting from Low, Medium, and High for triggering the heater. "High" is suggested for little temperature delta value. User may select the "Defrost Sensitivity" according to the temperature difference in the workplaces:

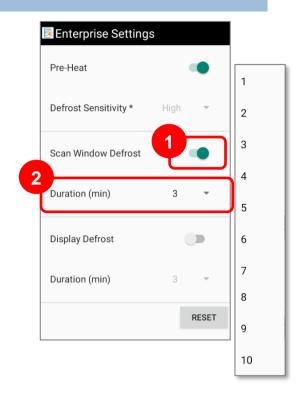


- **Low:** Sharp temperature difference between workplaces, e.g. employees move from the deep frozen storage to ambiet temperature, and thus it requires low sensitivity.
- **Medium:** "Medium" caters for a remarkable temperature difference between workplaces, e.g. employees move from freeze storage to ambiet temperature.
- ▶ **High:** Slight temperature difference in workplaces, e.g. employees move from the deep freeze storage to the chilled buffer zone, and then move to the ambiet temperature area.

2.1.3. SCAN WINDOW DEFROST

By enabling "Scan Window Defrost", the heater will be automatically turned on and turned off to defrost the scan window.

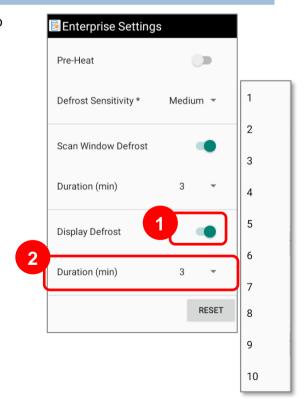
Once "Scan Window Defrost" is turned on, you can further set "Duration" which is the time period that the scan window keeps defrosting. The time unit is minute, and the default duration is 3 minutes.



2.1.4. DISPLAY DEFROST

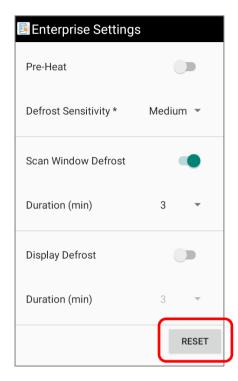
Turn on "**Display Defrost**" to enable the heater to be automatically on and off to defrost the device display.

By turning on "**Display Defrost**", "**Duration**" can be set to specify the time period that the device display keeps defrosting. The time unit is minute, and the default duration is 3 minutes.



2.1.5. RESET

To restore all the settings to the default, simply tap on "RESET" to proceed.



2.2 FULL-AUTOMATIC

"Full-Automatic" mode is for keeping the heater(s) on to make the device stay in your designated temperature range. When the device temperature is at the designated "Enable Temperature", the heater(s) automatically turns on, and once the device temperature reaches the upper temperature limit you set, the heater(s) is off.

2.2.1. DISPLAY HEATER

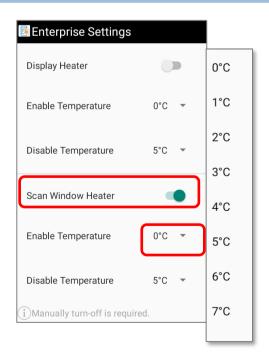
"Display Heater" is off by default. Tap to turn it on and set the "Enable Temperature" and "Disable Temperature". The available temperature is from 0°C to 30°C, and the default setting to enable display heater is 0°C and it stops heating at 5°C.



2.2.2. SCAN WINDOW HEATER

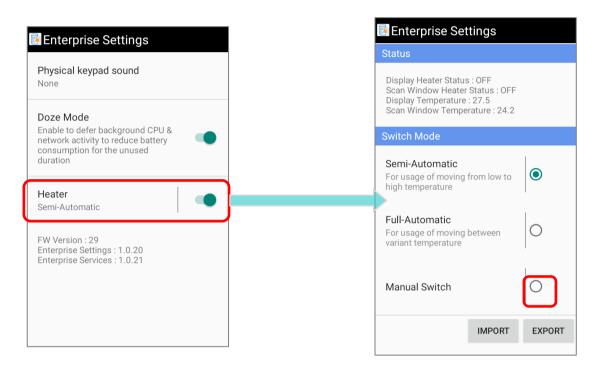
The default setting of "Scan Window Heater" is on, and its "Enable Temperature" is 0°C while "Disable Temperature" is 5°C.

Tap on the switch to turn it on or off, and tap to expand the drop down menu to set "**Enable Temperature**" and "**Disable Temperature**" from the available temperature range (0°C to 30°C).

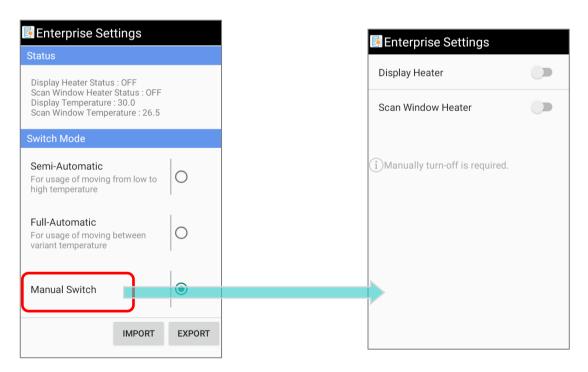


2.3 MANUAL SWITCH

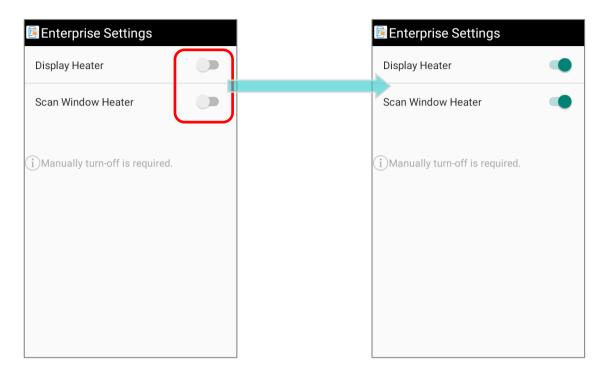
By enabling "<u>Heater</u>", users can further turn on "Semi-Automatic" or "Full-Automatic" or "Manual Switch". "Manual Switch" is disable by default. To enable "Manual Switch", simply tap on its radio button.



For advanced settings of "Manual Switch", please tap to enter the detail page.



When "Manual Switch" is on, both "Display Heater" and "Scan Window Heater" need to be activated respectively by the user.



Please note that it may cause unnecessary power consumption if keeping the heaters on. To save the battery power, please manually turn off the heaters.

NOTIFICATIONS

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3.1 PRE-HEAT

When the device is in "**Pre-heat**" status, the pre-heat notification icon is displayed on the status bar:



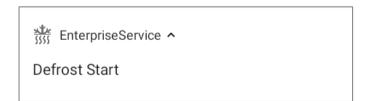
You may swipe down from the status bar to open the notification drawer for checking the related notification.

3.2 DEFROST

When the device is defrosting, the defrost icon shown on the status bar.



You may swipe down from the status bar to open the notification drawer for checking the related notification.



3.3 LOW BATTERY

When the battery power is pretty low, the low battery icon is shown on status bar. Swipe down from the status bar to open the notification drawer to check this notification:



Battery may run out soon, heaters are deactivated to avoid sudden power down or random behavior. Please change battery!

3.4 STANDARD BATTERY

If you accidentally install the standard battey, the standard battery icon is displayed on the status bar as well as the notification is on the notification drawer:

Battery Notification ^

RK95 Battery

The currently used battery is the standard battery which has a bearing on the working hour in a low temperature environment. Please replace it with the battery specialized for cold chain model.