

# ESCORT ConsolePlus

(EA-SWP-PLUS)

## **User Manual**

Ver. 3.1

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Console Plus is new revolutionary software for new product line iMINI, iMINI USB PDF, xTag and all future releases of Escort Verification Technologies/Cryopak Verification Technologies (EVT/CVT) products. It has all features to program, download, view and analyze critical data.

## 1. Quick start Guide

ConsolePlus software currently supports following product range

Product Family	Product code	Туре	Total No. of Sensors	Sensor Location	Sensor Type
iMINI (yellow case)	MX-IN-S-8-L	Multi-use	1	Internal	NTC
iMINI (yellow case)	MX-ST-S-8-L	Single Use	1	Internal	NTC
iMINI (yellow case)	MX-OE-S-8-L	Multi-use	1	External	NTC
iMINI (yellow case)	MX-1E-S-8-L	Multi-use	2	One Internal & One External	NTC
iMINI (yellow case)	MX-2E-S-8-L	Multi-use	2	Both External	NTC
iMINI (yellow case)	MX-HS-S-8-L	Multi-use	2	Both Internal	Digital sensor
iMINI (yellow case)	MX-HE-S-8-L	Multi-use	3	Two Internal & One External	Digital sensor & NTC
iMINIUSB pdf (Plug & Play)	MS-ST-S-8	Single Use	1	Internal	NTC

All new products from EVT/CVT will be supported by ConsolePlus. Software has in-built auto update feature, when a new release is available it will prompt user to upgrade to newest version. And with one click it will be updated.

## 2. Dependences

ConsolePlus can be installed on following platforms

- Windows XP
- Windows 7
- Windows 8

Adobe reader (latest Version) must be installed on the computer. If not, user may encounter error

- in PDF generation
- Print
- Print preview
- Software crash

### 3. Accessories

• For all **iMINI** (yellow case) data loggers **Type A to Mini-B USB cable** is required to connect data logger to the workstation







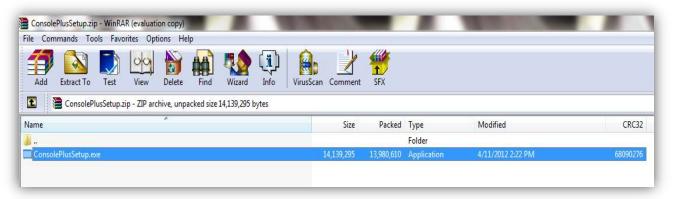
• iMINIUSB pdf data logger is Plug and Play data logger



#### 4. Installation

Setup file can be downloaded from <a href="https://www.escortdataloggers.com">www.escortdataloggers.com</a> for free File name: ConsolePlusSetup.exe / ConsolePlusSetup.zip

I. When you get started you should try to install the following application file:

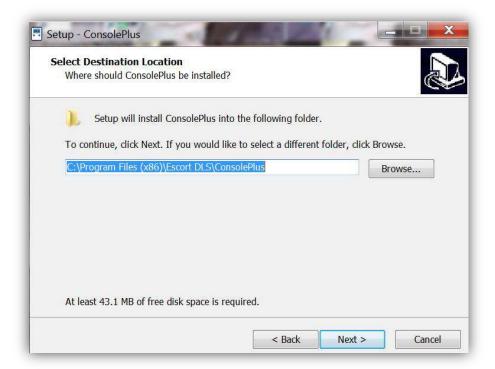


II. Once you have double clicked <u>ConsolePlusSetup.exe</u> file you will get the following Step through Wizard:

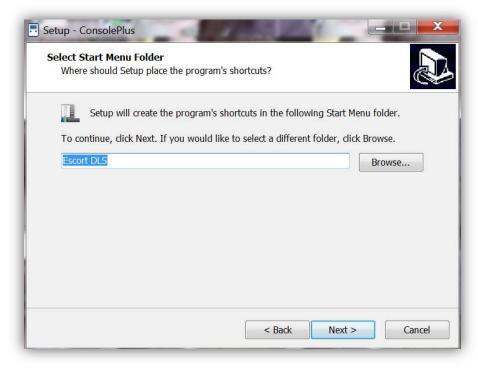


Note: Version no. \*.\*\* is being updated regularly

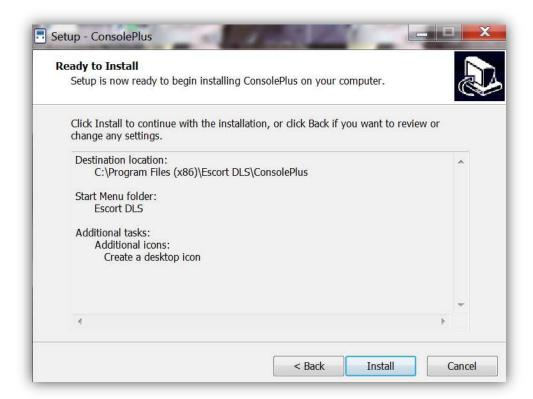
III. Browse to select the location of installation, if it is necessary or leave as default



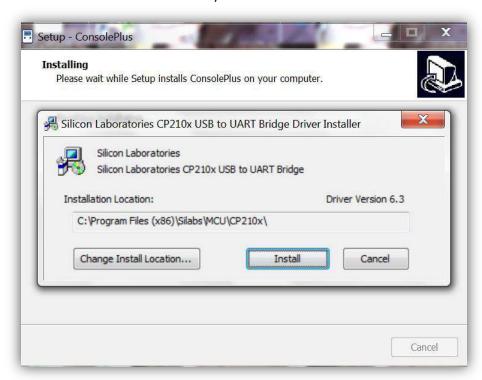
#### Click NEXT



Click NEXT



Click INSTALL to install the necessary drivers



Click INSTALL



Click FINISH to complete the installation process

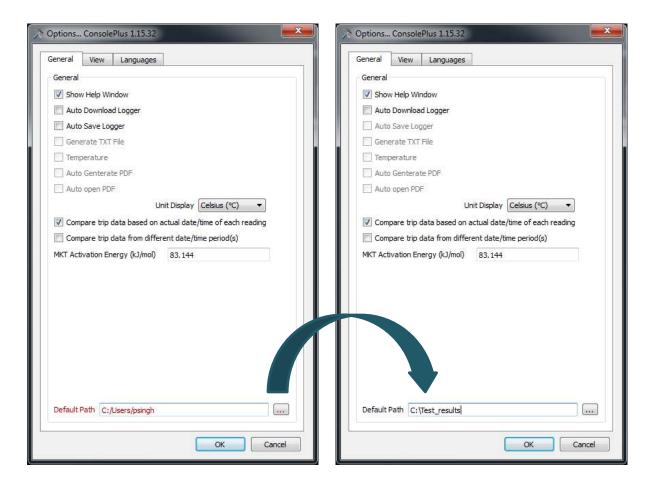
### 5. Introduction

ConsolePlus icon is created and placed on desktop after the installation is completed.



#### Launch ConsolePlus

- a. ConsolePlus \*.\*\* on top Left Corner, \*.\*\* denotes current version number
- b. When the application is launched for first time, the application window will open OPTIONS window and highlight in red text
- c. A default directory for the data can be assigned here, once default directory is assigned, path becomes black



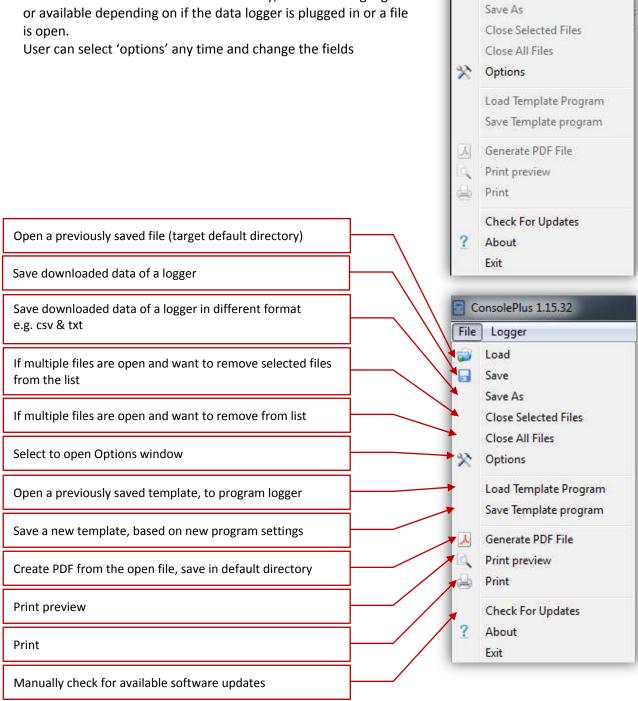
- d. Home page is displayed and most of the tabs and functions are greyed out.
   User can do initial settings at this stage or whenever required by selecting options.
- e. Make sure to manually check for *updates* before proceeding to next step.

Refer to Step 27



#### 6. Main Menu

Most of the functions are disabled initially, and will be highlighted

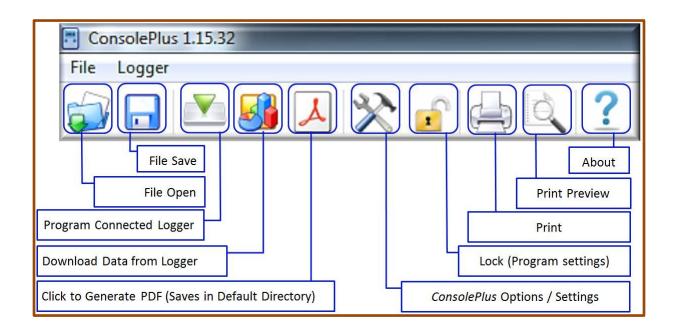


ConsolePlus 1.15.32

Logger Load Save

File

#### 7. Icons



#### 8. Tabs



Home: It display homepage

Program: Program settings of a programmed logger, or to program a logger

Graph: Graph view of downloaded data a logger or a file Histogram: Histogram view of downloaded data a logger or a file

Table: data/readings of all sensors of downloaded data of a logger or a file

Summary: Summary view of downloaded data of a logger or a file

## **Options (program settings)**

#### General tab

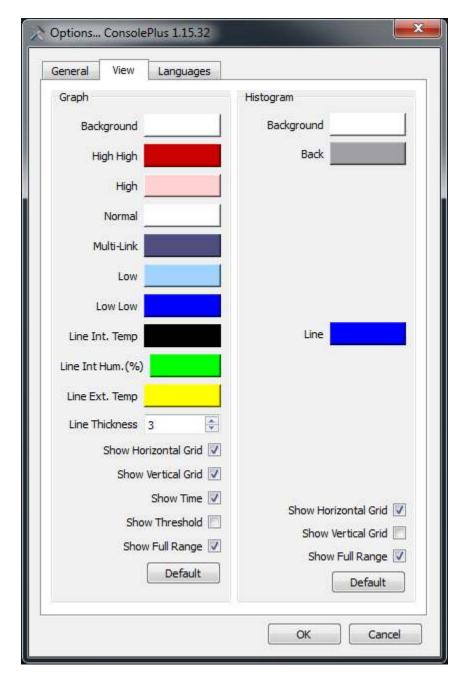
Click options, either from MENU, File – Options or simply by clicking icon



By default opens General tab, Options... ConsolePlus 1.15.32 General View Languages Displays Help window on right hand side of application if checked General If checked- auto download data from a logger as soon as logger is connected ✓ Show Help Window If checked- downloaded data from a logger is auto-saved in default directory Auto Download Logger Auto Save Logger If checked- data from a logger is auto-saved as txt file in default directory Auto Generate TXT If checked- data from a logger is auto-saved as CSV file in default directory Auto Generate CSV If checked- data from a logger is auto-saved as PDF file in default directory Auto Genterate PDF If checked- saved PDF file will auto-open (adobe acrobat must be installed) Auto open PDF Unit Display Celsius (°C) Can be selected Celsius or Fahrenheit Compare trip data based on actual date/time of each reading When data is multi-linked (actual time) Compare trip data from different date/time period(s) When data is multi-linked (from 1<sup>st</sup> reading) MKT Activation Energy (kJ/mol) 83.144 User can customize 'Activation Energy' value, to calculate MKT Default Path C:\Test\_results OK Cancel

Select / de-select any of the available options from General tab (e.g. if auto download or auto save required)

#### View tab



In View Tab, Graph and Histogram color settings can be changed and set as required

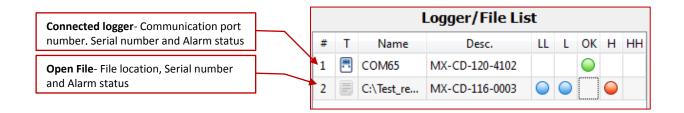
#### Languages tab

Six languages available to select from the list



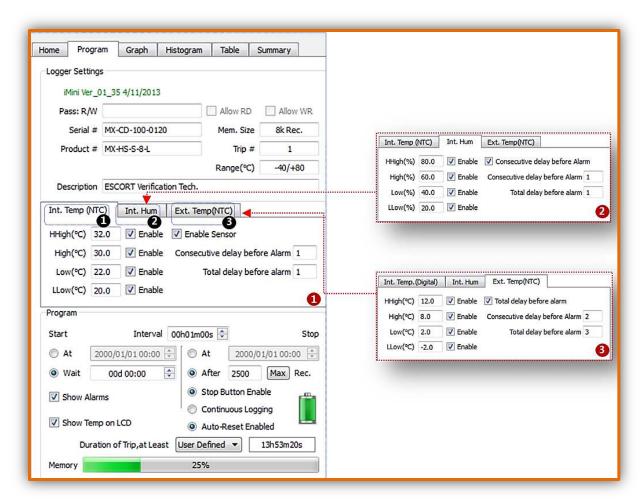
## 10. Program

- a. Plugin USB mini port to iMINI and connect the USB port into an available USB slot on workstation. (USB 5pin Mini cable to USB)
- b. ConsolePlus application will recognize the iMINI and will be available on left hand Logger / File List pane
- c. ConsolePlus application will display the serial number of iMINI and the alarm status. In functions tab it will reach to GRAPH tab by default.



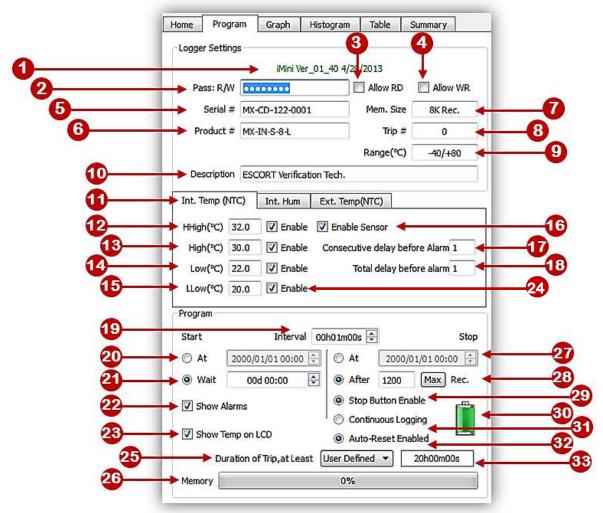
Text	Description	lcon
LL	If <b>Low Low Alarm</b> has triggered	
L	If <b>Low Alarm</b> has triggered	
ОК	If no alarm has triggered	0
Н	If <b>High Alarm</b> has triggered	
НН	If <b>High High</b> Alarm has triggered	0

- d. If the function tabs are greyed out, click 'download' icon from the top
- e. Select PROGRAM tab. All the previous program information of connected logger is displayed.
- f. If logger has only one sensor or other sensor combination, the respected tabs are greyed out by default. Software auto-detects the type of logger and display existing information Logger with external sensor only (MX-OE-S-8-L) will appear on 1<sup>st</sup> tab and title will appear int/ext temp. (NTC) Instead of Int. Temp (NTC)



**PROGRAM TAB** 

#### • Program Functions



No.	Details	Read / write
1	Firmware version of connected logger, or the logger of saved file	Read only
2	Enter Password, up to 8 numbers	write only
3	Allow to read the logger without password	
4	Allow to program the logger without password	
5	Serial number of the logger	Read only
6	Product code of the logger	Read only
7	Memory size of the logger	Read only
8	Trip number of the logger	Read only
9	Temperature range of the logger	Read only
10	Description	Read / Write
11	Sensor Int temp. / ext temp / Humidity	
12	High High Alarm threshold	Read / Write
13	High Alarm threshold	Read / Write
14	Low Alarm threshold	Read / Write
15	Low Low Alarm threshold	Read / Write
16	Sensor enable / disable	Read / Write
17	Consecutive delay before alarm (1 – 254)	Read / Write

18	Total delay before alarm (1 – 254)	Read / Write
19	Interval between each reading (5 seconds to 17H:59M:59S)	Read / Write
20	Start the logger at pre-defined date and time	Read / Write
21	Select the start delay	Read / Write
22	Show Alarms on the display	Read / Write
23	Show temperature on the display	Read / Write
24	Enable alarms, select / deselect, any or all	Read / Write
25	Duration of the trip, can be user defined, or choose from list	Read / Write
26	Memory used in previous trip	Read only
27	Stop the logger at pre-defined time (if selected)	Read / Write
28	Stop the logger after " " number of readings have been taken	Read / Write
29	Enable stop button	Read /Write
30	Battery status Icon	Read only
31	Enable non-stop logging (not available for single use loggers)	Read /Write(multi use)
32	Auto-reset enabled (not available for single use loggers)	Read /Write(multi use)
33	Total time for the designated trip	Read only

NOTE: Logger can be started by TIME / START button (immediate start or with delay) or with both options enabled. Please select these settings carefully

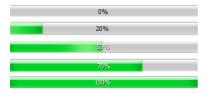




g. A confirmation dialogue will appear for the final approval



h. After acceptance bottom left corner progress bar will progress and display 100%.



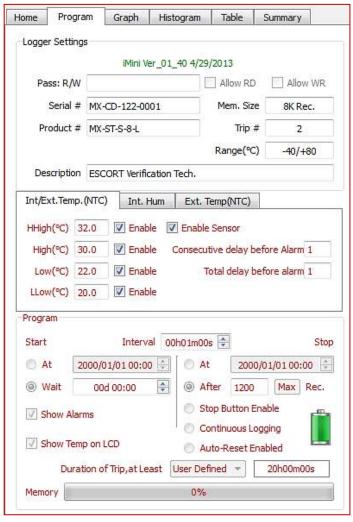
i. 'READY' will be on the LCD display of iMINI

Logger is ready to start logging, according to settings (timer or button) logger will start measuring and recording the data.

## 11. Lock program settings

Adjust the necessary fields or program settings for the next trip, (user can lock these settings if more loggers need to be programmed automatically (when connected). By clicking icon , it will turn as a the locked fields will the highlighted in PROGRAM tab in RED font as shown

This function is only available for the same product; product code must be similar for the next logger to be auto-programmed



## 12. Template (Save / Load)

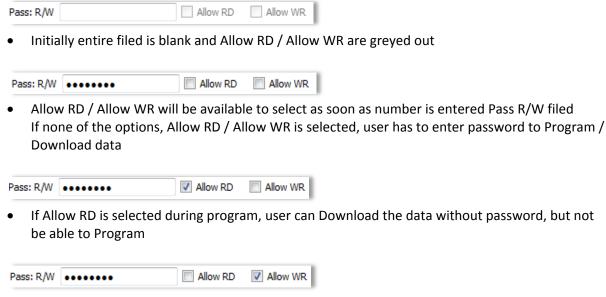
Program settings of a Data Logger can be saved as template and be used for future.

<u>Save Template Program</u>: User can save template from a data file (CVT) or from a connected logger. File will be with extension \*.xtp and saved at default location

<u>Load Template Program</u>: User can use previously save template (extension \*.xtp). If loaded, program will fill all the settings in the fields and will be displayed in Red color fonts (as above). Program lock icon will be locked and program icon will be highlighted as soon as the logger is plugged in and can be programmed with these saved settings

## 13. Password protection

In password protection, from **one** to **eight** numbers can be assigned during program, no alphabets are accepted.



• If Allow WR is selected during program, user can Program the logger without password, but not be able to Download the data

When logger is connected next time, ConsolePlus ask for a password depending on the option selected,

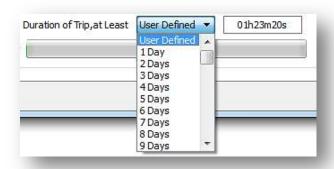


if **Allow RD** is selected during program, Read Without Password – READ button will be highlighted and clickable. After the click 'Download' button will be enabled and data can be downloaded manually by click or if Auto Download' is enabled

if **Allow WR** is selected during program, <u>Write Without Password</u> – <u>WRITE</u> button will be highlighted and clickable. After the click 'Program' tab will be enabled

## 14. User defined settings

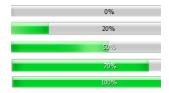
User can program the logger by selecting the list of pre-set no. of days from drop down list



Settings of 1 day to 60 day are available. Program will use full memory of the logger and set the time interval between each reading accordingly

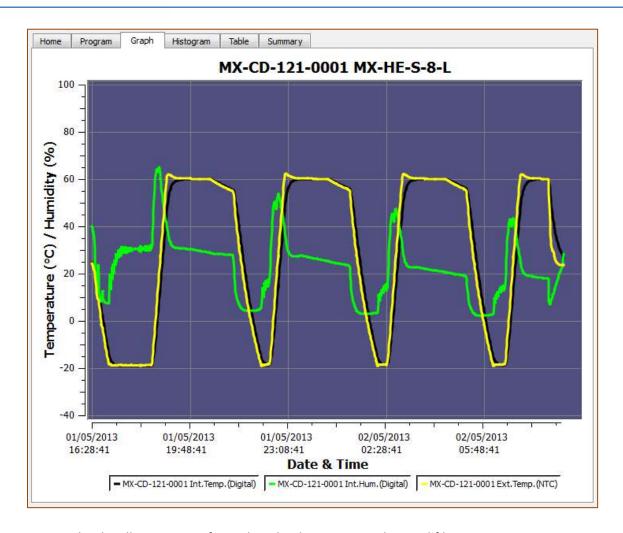
#### 15. Download

- a. Plug iMINI into the USB mini port and run the USB port into an available USB slot on workstation.
- b. ConsolePlus will auto download (if checked in options)
- c. Or user can always force the software to download by clicking 🚮 icon



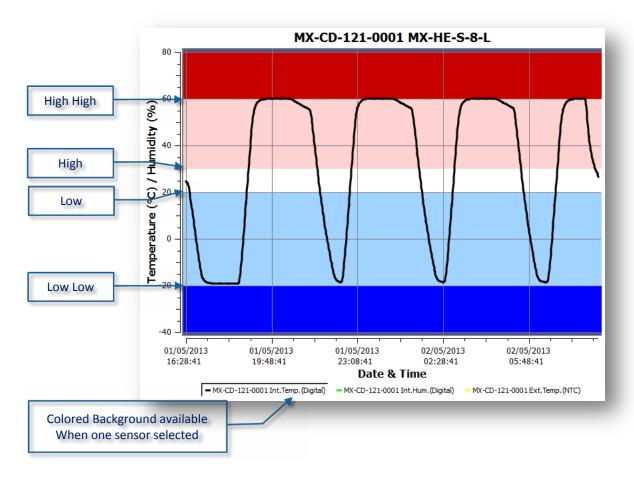
- d. A progress bar will appear (left bottom corner)
- e. Currently captured data or data of previous trip (if logger is displaying STOPPED) will be downloaded and will render the graph immediately of the data
- f. Download is also possible even if there is no data in the logger or new mission / trip has not started and device is displaying READY. In some events previous trip data is available.
  - This helps if logger is accidently programmed and hasn't yet started, user has a chance to recover the data
- g. Download option will be disabled if logger is password protected and Allow RD is disabled.

## 16. Graph



- Graph tab will auto open after a download or a previously saved file is open
- X-axis is always date & time axis
- Y-axis is Temperature or Temperature/Humidity (depending on the data logger type)
- If the logger is with one sensor, graph will display different colors in background at respective alarm range
- If the logger is multi-sensor, by default background is light blue (as above), settings can always be changed at any time
   Options → View Tab
- Graph Legend area has all the sensors available with respective information (S.No. & sensor)
- User can click each or any of these bullets to select / deselect that particular sensor in the graph.
  Graph will change accordingly in real time

• If only one sensor at a given time is selected, the background will display colors based on alarm conditions (HH, H, L, LL)



#### Mouse Zoom:

User can select some area in graph and it will zoom to the range for closer look

#### Mouse Tool Tip:

Hovering the mouse over the graph will show the reading no., time and data information in entire graph

### 17. Save/save as

If AUTO SAVE is checked in options, the data file will be saved automatically in default folder or user can manually save the data from the icon — or from

MENU → File → Save/save as

Save: by default extension \*.CVT in default folder

Save as: user can choose extension from drop down list \*.CVT, \*.TXT, \*.CSV

Or as PDF file, by default (PDF icon ) saves in default directory

- Auto Save Logger
- Auto Generate TXT
- Auto Generate CSV
- Auto Genterate PDF

Above options can be selected to 'auto save' different file types, this feature helps users to not to lose the data.

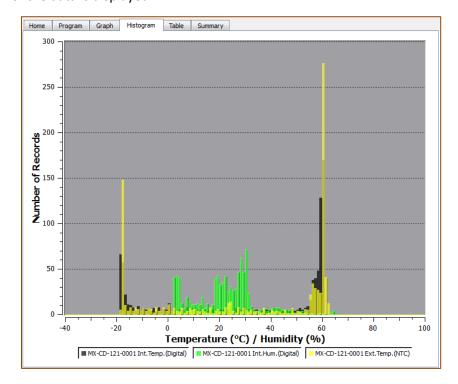
## 18. Auto-open PDF

ConsolePlus generates PDF automatically if selected in options  $\rightarrow$  'auto save PDF'. If the next option  $\rightarrow$  'auto open PDF' is enabled, generated PDF will open automatically as soon as the logger is connected and data is downloaded.

Adobe PDF applications must be installed on the computer. If Adobe PDF is not installed, user may receive a message during installation of ConsolePlus. If not installed, option → 'auto open PDF' will be permanently greyed out / disabled. Until the Adobe PDF is installed

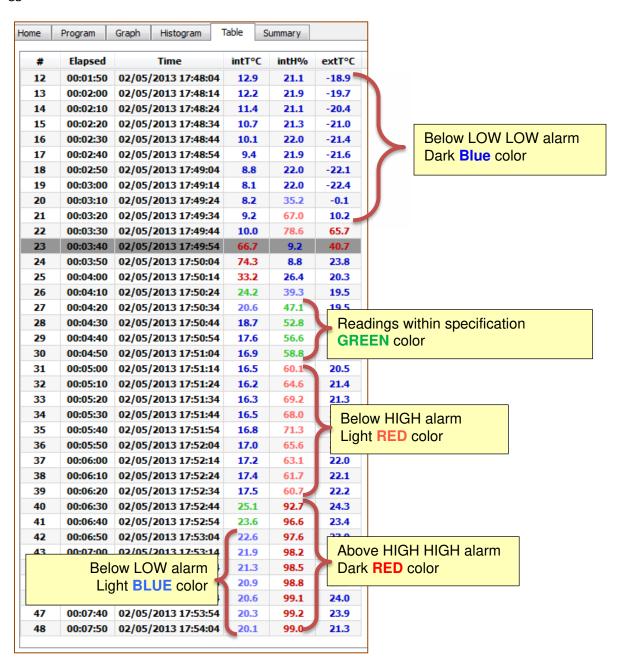
## 19. Histogram

Analytical view of the data is displayed

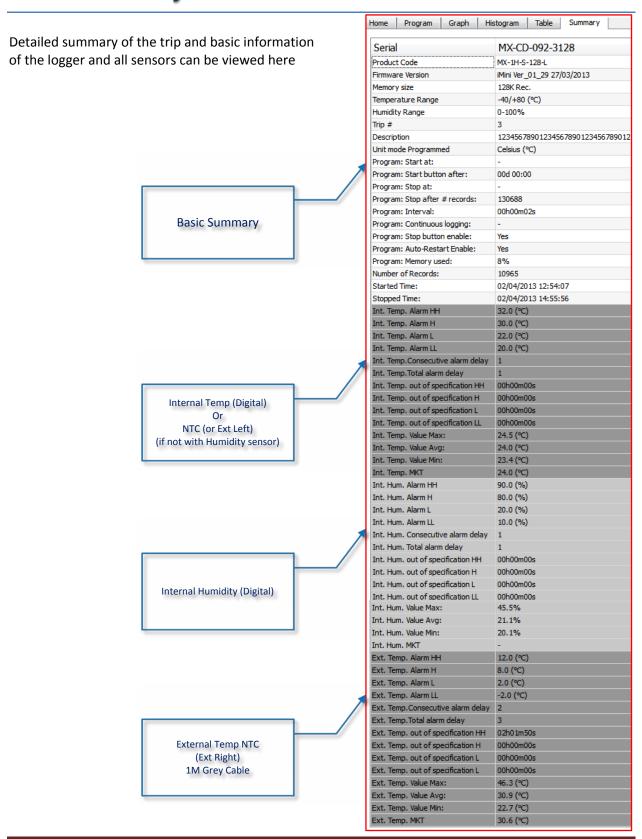


#### 20. Table

All the data from the logger (from START to FINISH of the current/last trip) can be viewed here. Scroll down to view all the data of the logger. Readings are in colored fonts according to alarm settings triggered to make them easier to understand and detect.



## 21. Summary



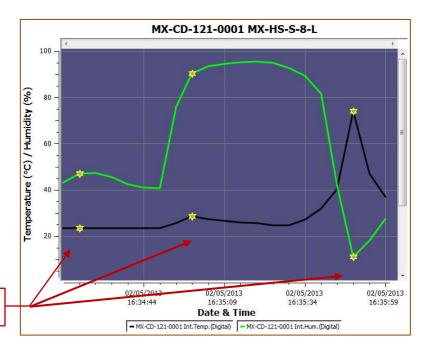
#### 22. Bookmark

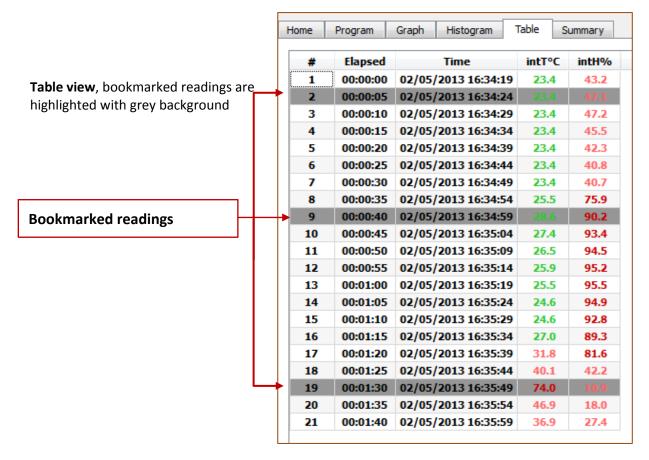
A Bookmark displays a MARKED reading, users can mark a reading during the logging by briefly holding START button on the logger for 3-5 seconds, MARKED text displayed on the LCD display of the logger screen for few seconds, and that reading is marked with time stamp

Once data is downloaded

**Graph view**, a STAR is placed at the time and reading

**Bookmarked readings** 





#### 23. MKT

User can view Mean Kinetic Temperature; on summary tab.

**Mean kinetic temperature (MKT)** is a simplified way of expressing the overall effect of temperature fluctuations during storage or transit of perishable goods

Activation energy (typically within 60–100 kJ·mol<sup>-1</sup> for solids or liquids), ConsolePlus allow users to customize activation energy. This option is available in Options / settings on general tab

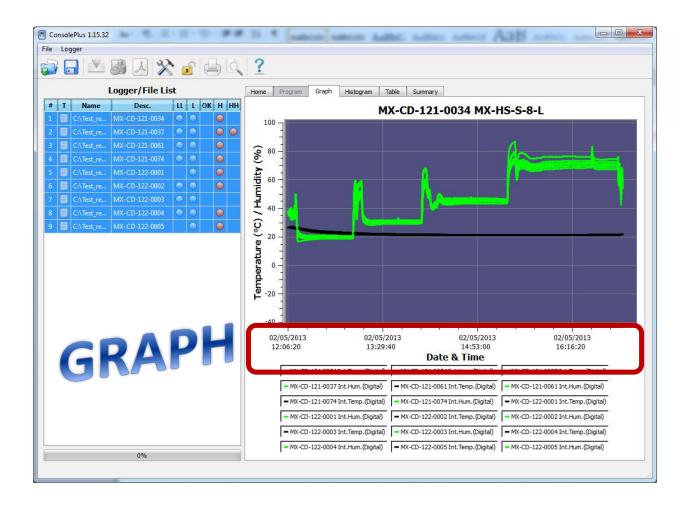
#### 24. Multilink

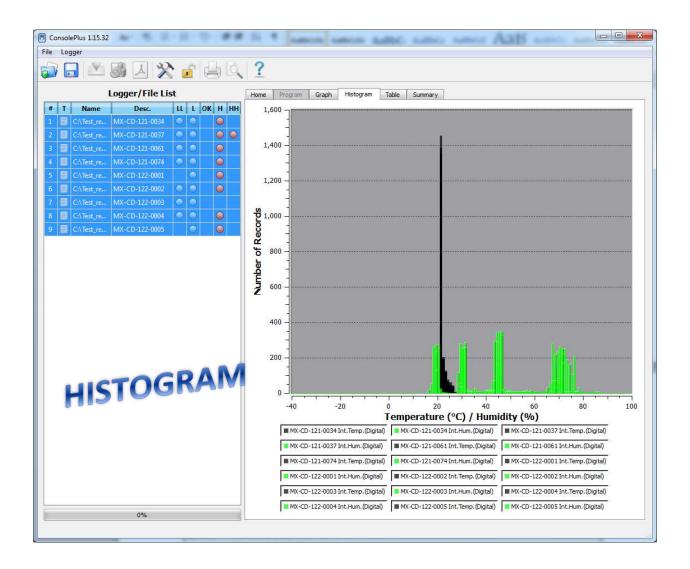
User is allowed to link multiple files (with extension CVT) by selecting with mouse or by pressing shift and selecting individual files. Compare the results with different options.

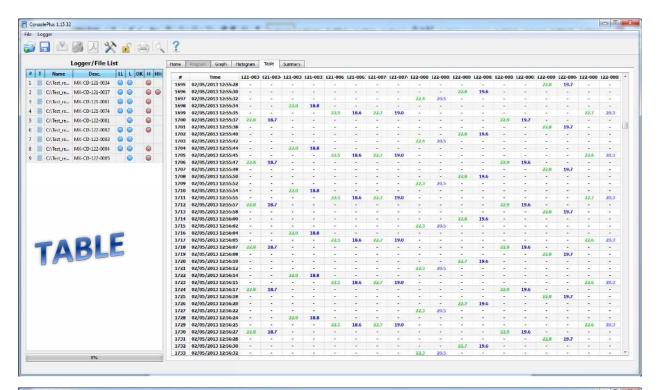
- I. Compare trip data based on actual date/time of each reading
- II. Compare trip data from different date/time period(s)

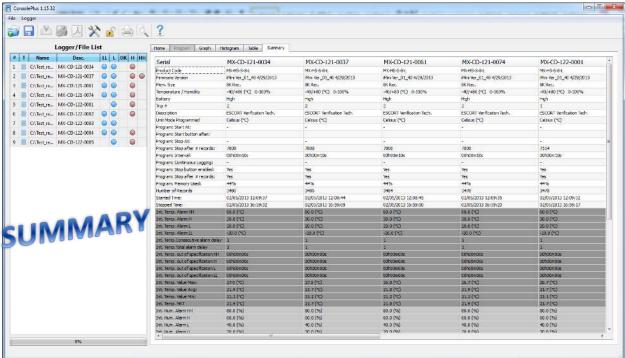
The linked files also can be saved into TXT and CSV format for further evaluation or to print. Data from multiple files also reflects in Graph, Histogram, Table and Summary

I. Compare trip data based on actual date/time of each reading

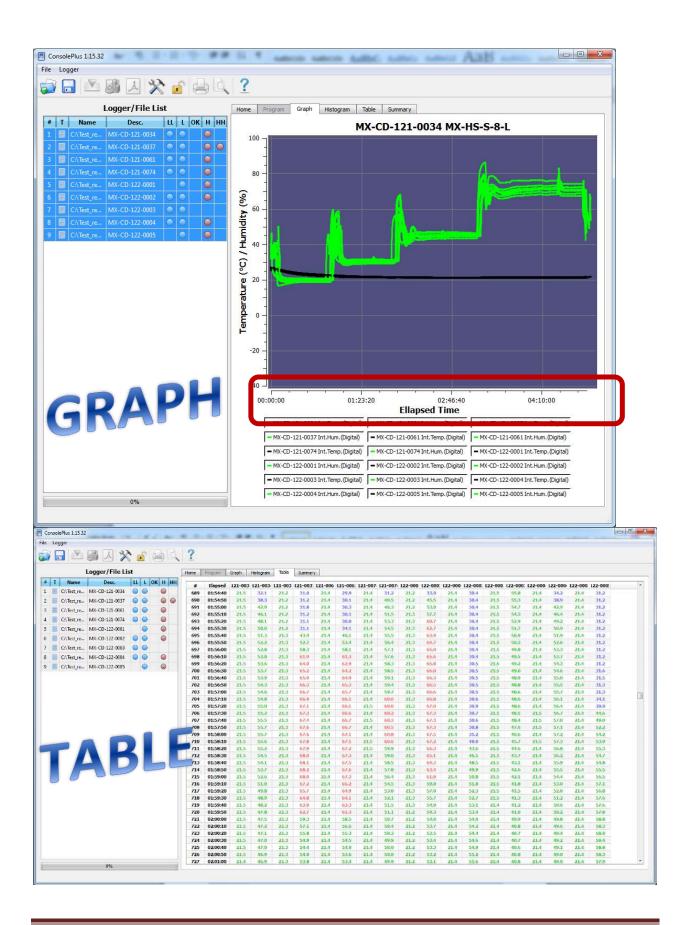








II. Compare trip data from different date/time period(s)



## 25. Battery Status

Logger's battery status is directly displayed on program tab. Software can detect the status and report with icon



**OK** battery



Low battery

If the data logger has low battery, low battery symbol is displayed on LCD of the data logger (if logger supports LCD)

## 26. Print / Print-preview

Print / Print-preview functions are available in ConsolePlus, when a file is open or logger is connected and downloaded. Available in main menu and icons are at the top of the application

## 27. Update

**ConsolePlus** software will check for updates automatically and will display a confirmation message when application is launched.

Also it can be easily updated manually from MENU tab, by selecting 'check for update'. So user need not to download a separate file all the time.

For more information about product and applications please contact <a href="mailto:techsupport@escortdataloggers.com">techsupport@escortdataloggers.com</a>