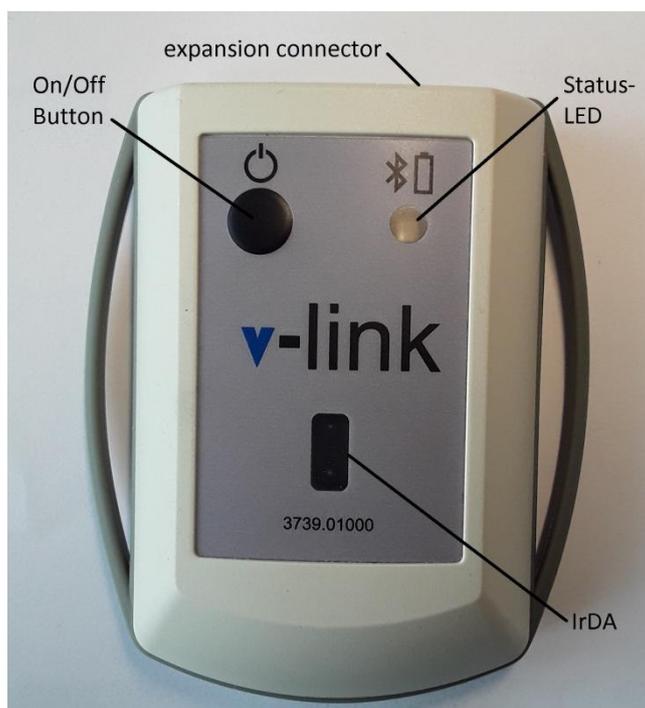


3739 v-link

Multi-interface readout device for vending machines operated via smartphone app



Scope of delivery

- v-link box
- carrying strap
- Qi charging station with USB cable
- quick start guide



Overview

The v-link is a mobile communication solution for vending machines that can be used to read EVA-DTS sales statistics, import configurations and transfer software updates. For this purpose, v-link supports the IrDA interface and the DDCMP and DEX/UCS protocols commonly used in vending. Further interfaces such as jack connectors or thermo printer can be addressed via cable adapters which can be ordered separately. The v-link is operated via an Android app (also "v-link"), which is provided free of charge.

Read-out statistics can be displayed by the app or sent to a database server via a SIM card for further processing.

These instructions explain the necessary steps to make the v-link ready for operation and to read most vending machines. It also provides a brief introduction to the v-link app. Update and configuration of vending machines as well as advanced operating concepts are explained in the detailed operating manual.

Before first use

The v-link box is not supplied with a fully charged battery, so it has to be inductively charged with a Qi charger prior to the first use. Mikrolab recommends using the supplied charger for charging the box. Connect the USB cable of the charger to your PC and place the v-link box in the middle of the device. The box will activate and begin the charging cycle.

The v-link control app can be obtained free of charge from the Google App Store (search for v-link, or use the QR code to the right) and must be installed on a smartphone or tablet with Android 5.1 to 9.x. The app is not available for iOS.



The detailed operating instructions for the v-link can be downloaded from Mikrolab's homepage (<http://www.mikrolab.com/public/telemetry.html> or use the QR code to the left). Please read these carefully.

Status symbols of the app

The top row of the v-link app displays some status icons:

	blue: Data available for upload green: FTP client online/ connection active
	green: Remote connection active
	displays the charge status of the connected v-link box in steps of 25%
	indicates whether a v-link box is connected to the app (green) or not (white/red). red indicates a connection error or an unexpected connection loss
	opens a drop-down menu with additional menu items

LED codes of the v-link box

The v-link box uses an RGB LED to display status messages:

green, flashing	not connected to the app, battery charge sufficient
red, flashing	battery weak, should be charged
blue, flashing	bluetooth connection with the app is established, battery charge sufficient
blue and red, flashing in turn	bluetooth connection with the app is established, battery charge is low
magenta	initialization or shutdown
magenta, flashing fast for 5 times	battery charge very weak, the v-link switches off (deep discharge protection)
cyan, steady	the v-link performs an operation, e.g. a VMC readout. The LED stays cyan for the entire operation, but is interrupted by the bluetooth / charge level flashes
green, approx. 2,5 s	displayed only if an operation was started by the v-link key. The operation was successful
red, approx. 2,5 s	displayed only if an operation was started by the v-link key. The operation was not successful
yellow, steady	the v-link is being loaded and is not performing an operation. Will be interrupted by the bluetooth / charge level flashes

Connecting the v-link box to the app

The v-Link box must be paired with the smartphone before it can be used for the first time. To do this, perform the following steps:

- Start the v-link box by pressing the On/Off button.
- Start the app and select the menu item "search BT device".¹
- Press search. The app will now list all discoverable Bluetooth devices in the vicinity.
- Select the device ML_xxxx-yyy (xxxx-yyy corresponds to the serial number on the v-link box) and confirm the pop-up message(s). If the v-link box does not appear in the list, briefly press its On/Off button and then press "search" again.
- As soon as the Bluetooth status icon turns green, the app and the box are paired.

These steps are only necessary during initial commissioning; once the app and box have been successfully paired, they will automatically reconnect at a later time as soon as they are within range. This can be accelerated by tapping the Bluetooth status icon.

Reading out vending machines

- Make sure v-link app and box are connected (green Bluetooth status icon)
- Select the menu item "read machine".
- In the following menu, select under "Interface" which interface and which protocol you want to use to read out the vending machine.
- Hold the v-link box in front of the vending machine so that the two IR interfaces are about 30-80 cm away and point towards each other (IrDA readout) or connect the v-link box to the vending machine (jack connector, printer, etc.) using a cable adapter.
- Press the "STARTxxx" button in the app. The v-link will then start the readout.
- If the readout was successful, the readout statistics can be displayed directly by touching their name; otherwise an error message appears.

Deactivating the v-link box

To increase the battery life of the v-link box, it is recommended to deactivate the v-link box if no further readouts are to be taken within the next few minutes. To do this, press the On/Off button of the box for about 3 seconds until the LED lights up in magenta.

¹ The default language of the app is German. To change this tap the menu button and "Konfiguration", then select "English" under "Sprache".