

## \_Alignment tool CAB-RV1

RapidView-1 – is a special diagnostic device that is used for InfiNet Wireless equipment comfort installation, antenna alignment and configuration.

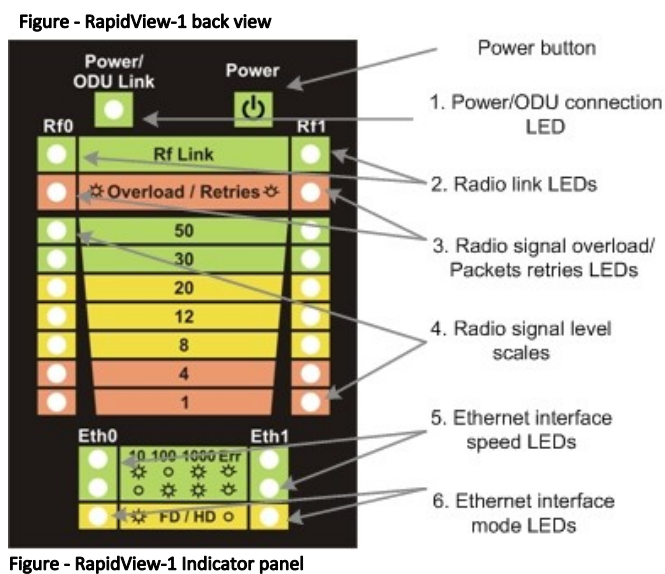
Device allows getting the following information:

- Radio link establishment indication
- Visual monitoring of radio signal levels
- Receiving retries information
- Diagnostic of RF and Ethernet interfaces.



Figure - RapidView-1 top view





#### How to use

1. For turning **RapidView-1** on simply push «Power button»
2. Device LEDs will light up for 2 seconds
3. Device will perform constant tries to connect to ODU. If device's power is normal Power/ODU connection LED (1) will blink 1 time per second. If device's power is low LED 1 will blink 4 times per second in turn with not lighting intervals.
4. Once ODU link is established LED 1 stops blinking (if power is normal) and device's interfaces status are shown by LEDs 2-6.
5. 1 time per second device updates its status output.
6. If ODU link will be broken LEDs 2-6 will go out after 2 seconds and LED 1 will start blinking 1 time per second.

Diagnostic device connection to ODU should be done via console port of the ODU. Once link is up between ODU and diagnostic device the following record is put in ODU system log:

- Connected test unit. Begin service communication over console
- Test unit detected: rf0 – rf5.0

Exact radio interface names depend on wireless equipment configuration.

When diagnostic device is unplugged from the following record is put in ODU system log:

Test unit disconnected. Return to normal console mode.

#### LEDs modes description

ODU status monitoring via diagnostic device is performed by its LEDs indication. LEDs modes and ODU status correspondence is shown in the following table

LED	Function
<b>Power/ODU connection LED</b>	Shows diagnostic device power status and diagnostic device-ODU connection status: <ul style="list-style-type: none"> <li>• Constant lighting — diagnostic device-ODU connection established, diagnostic device power is normal</li> <li>• Blinking 1 time per second — diagnostic device power is normal, diagnostic device-ODU connection is not established</li> <li>• Blinking 4 times per second — diagnostic device-ODU connection established, diagnostic device power is low (change batteries)</li> <li>• Frequent blinking with intervals — diagnostic device power is low, diagnostic device-ODU connection is not established</li> </ul>
<b>Radio link LEDs</b>	Shows whether radio link is established on certain ODU's radio interface: <ul style="list-style-type: none"> <li>• Constant lighting — radio link is established.</li> </ul> <p>What ODU's radio interface to show by what column RF0 or RF1 is chosen by the following way:</p> <ul style="list-style-type: none"> <li>• for RF0 column is taken radio interface with the least number</li> <li>• for RF1 the other interface.</li> </ul> <p>For example, there are the following radio interfaces on ODU: Rf5.0, rf5.1. Then for RF0 column rf5.0 will be taken, for RF1 — rf5.1.</p> <p>When no radio link then LEDs 2-4 are not lighting</p>

<b>Radio signal overload/Packets retries LEDs</b>	<p>Shows receiving radio signal level overload and number of packet retries information:</p> <ul style="list-style-type: none"><li>• Constant lighting —receiving radio signal level on the interface is too high.</li><li>• Blinking 4 times per second - number of retries &gt;= 50%</li><li>• Blinking 2 times per second - number of retries &gt;= 28 %</li><li>• Blinking 1 time per second - number of retries &gt;= 7 %</li></ul> <p>If certain radio interface (radio module) is not present on the device then all corresponding LEDs of this radio interface is off.</p> <p>If ODU has certain radio interface but it is not activated (for example, not entered «mint rf5.0 start» command) then LED 3 is blinking 1 time per second whereas LEDs 2 and 4 are not lighting.</p> <p>If ODU has certain radio interface but it is not activated (for example, not entered «mint rf5.0 start» command) then LED 3 is blinking 1 time per second whereas LEDs 2 and 4 are not lighting.</p> <p>If ODU has certain radio interface activated («mint rf5.0 start» command entered) then LED 3 is blinking 4 times per second whereas LEDs 2 and 4 are not lighting</p>															
<b>Radio signal level scales</b>	<p>Shows receiving signal level of the established radio link.</p> <p>Each LED can be in 3 modes:</p> <ul style="list-style-type: none"><li>• Not lighting — radio signal level is lower than scale value</li><li>• Blinking — the more frequently is blinking the nearer signal level is to given scale value</li><li>• Constant lighting — signal level is higher or equal to scale value</li></ul>															
<b>Ethernet interface data rate LEDs</b>	<p>Shows data rate of the corresponding Ethernet interface.</p> <p>There are 2 LEDs for each Ethernet interface (Eth0 and Eth1)</p> <table><tr><th></th><th>10 Mbps</th><th>100 Mbps</th><th>1000 Mbps</th><th>Error</th></tr><tr><td>Upper LED</td><td>Lighting</td><td>Not lighting</td><td>Lighting</td><td>Blinking</td></tr><tr><td>Lower LED</td><td>Not lighting</td><td>Lighting</td><td>Lighting</td><td>Blinking</td></tr></table>		10 Mbps	100 Mbps	1000 Mbps	Error	Upper LED	Lighting	Not lighting	Lighting	Blinking	Lower LED	Not lighting	Lighting	Lighting	Blinking
	10 Mbps	100 Mbps	1000 Mbps	Error												
Upper LED	Lighting	Not lighting	Lighting	Blinking												
Lower LED	Not lighting	Lighting	Lighting	Blinking												
<b>Ethernet interface mode LEDs</b>	<ul style="list-style-type: none"><li>• Constant lighting — Full Duplex</li><li>• Not lighting — Half Duplex.</li></ul> <p>If Ethernet connection is established but corresponding ODU’s interface is not enabled then LEDs 5, 6 indicate connection configuration by blinking 1 time per second</p>															

Table - LEDs modes description