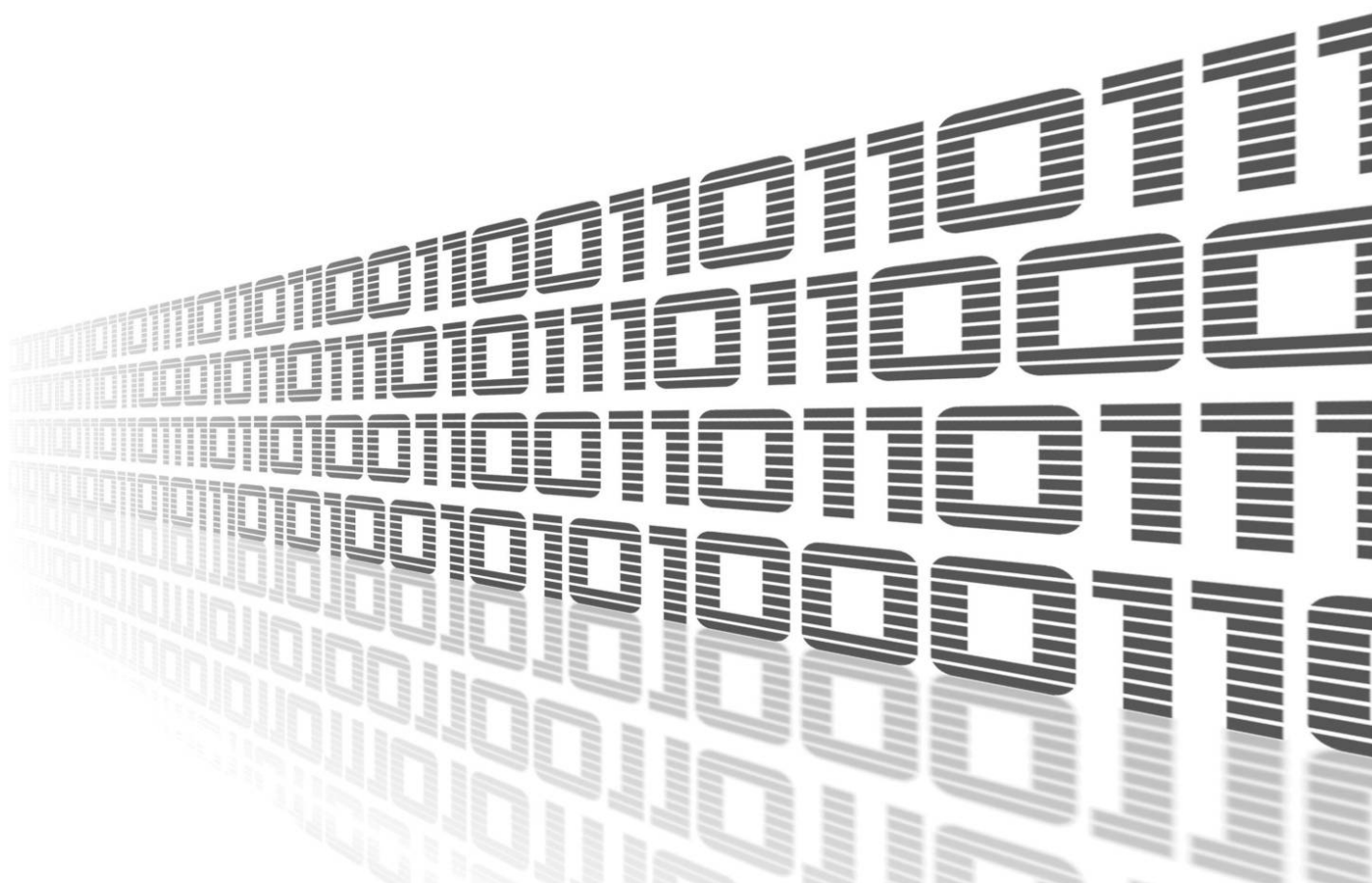


ADVANTECH



Sleep Mode





© 2024 Advantech Czech s.r.o. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photography, recording, or any information storage and retrieval system without written consent. Information in this manual is subject to change without notice, and it does not represent a commitment on the part of Advantech.


Advantech Czech s.r.o. shall not be liable for incidental or consequential damages resulting from the furnishing, performance, or use of this manual.


All brand names used in this manual are the registered trademarks of their respective owners. The use of trademarks or other designations in this publication is for reference purposes only and does not constitute an endorsement by the trademark holder.

Used symbols

 *Danger* – Information regarding user safety or potential damage to the router.

 *Attention* – Problems that can arise in specific situations.

 *Information* – Useful tips or information of special interest.

 *Example* – Example of function, command or script.

Contents

1. Changelog	1
1.1 Sleep Mode Changelog	1
2. Router App Description	2
3. Configuration	3
3.1 Example	4
4. Related Documents	5

List of Figures

1 Router app menu	2
2 SmartFlex RA Configuration GUI	3
3 SmartStart/ICR-3200 Configuration Example	4

List of Tables

1 Sleep Mode Configuration Parameters	4
---	---

1. Changelog



This Router App has been tested on a router with firmware version 6.3.10. After updating the router's firmware to a higher version, make sure that a newer version of the Router App has not also been released, as it is necessary to update it as well for compatibility reasons.

1.1 Sleep Mode Changelog

v1.0.0 (2019-03-01)

- First release.

v1.1.0 (2020-10-01)

- Updated CSS and HTML code to match firmware 6.2.0+.

v1.2.0 (2022-11-03)

- Reworked license information.

v1.3.0 (2024-01-30)

- Added support for BIN2 and BIN3.
- Added description and summary files.
- Recompiled with ModulesSDK 2.1.0.

v1.3.1 (2024-03-13)

- Fixed detection of the wakeup BIN.

2. Router App Description



Router app is not contained in the standard router firmware. Uploading of this router app is described in the Configuration manual (see Chapter [Related Documents](#)).



This router app is compatible with Advantech routers of **v3** (SmartStart, SmartFlex, SmartMotion, ICR-3200, ICR-3800), **ICR-2700**, **ICR-2800**, **v4** (ICR-4400), and **v4i** (ICR-4100, ICR-4200) platforms only.

The *Sleep Mode Router App* enables the activation of Low Power Mode (LPM) on dedicated routers and subsequent wake-up based on various parameters. This advanced GUI leverages the LPM command support in these routers, providing a versatile tool for power management.

Control parameters for entering sleep (low power mode) and waking up include binary inputs or time-based triggers, such as time period expiration and specific times of day.

To configure the *Sleep Mode Router App*, use the router's web interface. Access it by clicking on the module name on the *Router Apps* page. The left side of this interface features a menu with a *Return* link under the *Customization* section (refer to Figure 1), which navigates back to the main router's web interface. The central part of the interface presents the configuration options, which are detailed in the following chapter.

Sleep Mode

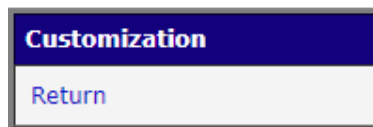


Figure 1: Router app menu

3. Configuration



Attention! Exercise caution when configuring the *Sleep* section in the Router App. Improper settings can cause the router to remain in low power mode for an extended period or, in some configurations, prevent it from waking up at all. If you find yourself unable to wake the router, performing a factory reset should restore its functionality.



The binary inputs available for particular router models may vary. For details on binary inputs see *User Manual* of your particular device, chapter *I/O Port*.

You can activate the *Sleep Mode* Router App and configure the *Wake Up* and *Sleep* settings. As illustrated in Figure 2, an example setup for the SmartFlex router is shown, designed to power the router when binary input 1 is active and enter sleep mode after 10 seconds of inactivity on binary input 1.

For detailed configuration item explanations, refer to Table 1. To implement your desired *Wake Up/Sleep* event(s), select the appropriate options and click *Apply* to confirm the changes.

Figure 2: SmartFlex RA Configuration GUI

Number	Description
Enable Sleep Mode	Activate the router app.
Wake Up if binary input # is active	Wake up the router from low power mode when a binary input number # signal becomes active (switched on). The specific binary input number, as well as the total number of inputs available, varies across different platforms.
Wake Up after ___ s	Countdown interval (in seconds) to wake up the router from low power mode. Minimum is 5 seconds.

Continued on the next page

Continued from previous page

Number	Description
Wake Up at HH:MM	Hour and minute of the day when the router will wake up from low power mode regularly every day.
Sleep if binary input # is inactive/active for ___ s	Inactive is default (status = off), since wake up can be done only on active input number #. You can set the length of the binary input inactivity/activity (impulse) that leads to sleep mode. The specific binary input number, as well as the total number of inputs available, varies across different platforms.
Sleep if after ___ s	Countdown interval (in seconds) to switch to low power mode (sleep). Minimum is 5 seconds.
Sleep at HH:MM	Hour and minute of the day when the router will be switched to low power mode regularly every day.

Table 1: Sleep Mode Configuration Parameters



Multiple *Wake Up/Sleep* events can be activated simultaneously. In such cases, the **first event takes precedence**. For example, if both *Wake Up if binary input #* and *Wake up at HH:MM* are active, the router wakes up at the specified HH:MM. Subsequently, activating the binary input has no effect because the router is already awake.

3.1 Example

Figure 3 illustrates configuring the *Sleep Mode* for SmartStart/ICR-3200 routers, where waking up through binary input 0 is enabled. The router is set to automatically enter sleep mode 2 hours (7200 seconds) after being woken up. It can be reactivated if binary input 0 becomes active, or it will automatically wake up after 4 hours (14400 seconds) if the binary input remains inactive.

Sleep Mode Configuration

Enable Sleep Mode

Wake Up
 if binary input 0 is active
 after s
 at : hh:mm

Sleep
 if binary input 0 is for s
 after s
 at : hh:mm

Figure 3: SmartStart/ICR-3200 Configuration Example

4. Related Documents

You can obtain product-related documents on *Engineering Portal* at icr.advantech.com address.

To get your router's *Quick Start Guide*, *User Manual*, *Configuration Manual*, or *Firmware* go to the [Router Models](#) page, find the required model, and switch to the *Manuals* or *Firmware* tab, respectively.

The *Router Apps* installation packages and manuals are available on the [Router Apps](#) page.

For the *Development Documents*, go to the [DevZone](#) page.