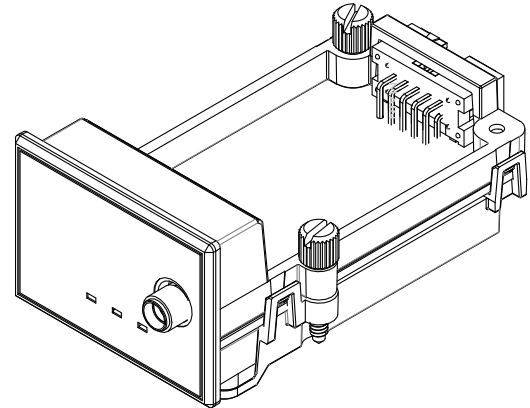**RedLion™**

DA Wi-Fi Sled
Installation Guide

- Wi-Fi communication
- Industrial rated for harsh environments
- Simplified deployment architecture
- Field installable

CE

For use with DA50 and DA70 series covered in DEMKO 20 ATEX 2268X and IECEx UL 20.0007X certificates

PACKAGE CHECKLIST

This product package should contain the items listed below. If any items are missing or damaged, contact Red Lion immediately.
  - DA Wi-Fi Sled
  - Installation Guide

SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in this document or on equipment must be observed to ensure personal safety and to prevent damage to either the device or equipment connected to it.

Do not use these products to replace proper safety interlocking. No software-based device (or any other solid-state device) should ever be designed to be responsible for the maintenance of personnel safety or consequential equipment not equipped with safeguards. Red Lion disclaims any responsibility for damages, either direct or consequential, that result from the use of this equipment in a manner not specified.

⚠	CAUTION: Risk of Danger Read complete instructions prior to installation and operation of the unit. ATTENTION : Risque de danger Lire les instructions complètes avant l'installation et l'utilisation de l'appareil.

ORDERING INFORMATION

DESCRIPTION	PART NUMBER
Wi-Fi Sled	DA S00 WF1 0N0 AM000

Spaces in listed part numbers are shown to improve readability, do not include when searching for or ordering these parts.

SPECIFICATIONS

1. **POWER REQUIREMENTS**: Power is supplied by the DA host controller.
   Max Power: 2.1 W
2. **Power Output:**
   Wi-Fi: 20.5 dBm
3. **FREQUENCY SPECIFICATIONS:**

TECHNOLOGY	CHANNELS	FREQUENCIES
Wi-Fi	1-13	2412 - 2472 MHz

   Note: Channel/frequency limitation is enforced based on configured country/region code.
4. **INTERFACES:**
   Wi-Fi: One RP-SMA Connector
5. **Wi-Fi COMPLIANCE:** TCP/IP; 802.11 b/g/n Wi-Fi MAC protocol
6. **ENVIRONMENTAL CONDITIONS**:
   Operating Temperature Range: -40 to 75 °C
   Storage Temperature Range: -40 to 80 °C
   Vibration to IEC 60068-2-6: Operational 5-500 Hz, 2 g
   Shock to IEC 60068-2-27: Operational 15 g
   Operating and Storage Humidity: 0 to 95% max. RH non-condensing
   Altitude: Up to 2000 meters
7. **CERTIFICATIONS AND COMPLIANCES**:
   Refer to the controller manual for agency certifications.
   CE Approved
      EN 61326-1 Immunity to Industrial Locations
      Emission CISPR 11 Class A
      IEC/EN 61010-1
      RoHS Compliant
8. **ANTENNA CONNECTOR**:
   One front panel RP-SMA main antenna connection
9. **INSTALLATION REQUIREMENTS**: Sled must be installed inside the unit case with the hardware provided. See "Installing the DA Wi-Fi Sled" for more details
10. **WEIGHT**: 7.05 oz (200 g)

INSTALLING THE DA Wi-Fi SLED

> **CAUTION**: Follow standard ESD precautionary procedures.
> **ATTENTION**: Suivez les procédures de précaution standard de décharge électrostatique.

> **WARNING** - Disconnect all power to the unit before installing or removing sleds.
> **AVERTISSEMENT** - Débranchez l'alimentation électrique de l'appareil avant d'installer ou de retirer les tiroirs.

DA50 INSTALLATION

1. Prior to installing the Sled for your DA50 application, ensure that the unit is not receiving power.
2. Disconnect and remove your DA50 from the DIN rail.
3. Remove the DA50 unit's front cap by squeezing the sides and pulling.
4. Slide out the sled holder.
5. Install a sled into the sled holder and hand tighten the captive fasteners, or use a screwdriver.
6. Re-install the sled holder containing the sled into the Converter. Make sure it is fully seated.
7. Replace the front cap.

DA70 INSTALLATION

1. Prior to installing the Sled(s) for your DA70 Controller application, ensure that the Controller is not receiving power.
2. Remove the carriage from the Controller case by releasing the two retaining latches and pulling straight out from Controller

3. Remove blank panel from the carriage slot of the target sled installation location.
4. Install sled by aligning the two sled mounting hole fasteners, with the controller mounting posts. Be sure locating holes on bottom side of sled align with the locating pins on the carriage, and the sled sits flush against the carriage.
5. Hand tighten the sled captive fasteners, or use a screwdriver if necessary.
6. Repeat the above steps for any additional sleds.
7. Carefully align the carriage with the Controller base and press carriage into the controller.

> **CAUTION**: Failure to properly align the carriage can result in damage to the Sled connector pins.
> **ATTENTION:** Si le tiroir n'est pas correctement aligné, les broches du connecteur du tiroir risquent d'être endommagées.

8. Close the retaining latches to ensure the carriage is fully seated into the Controller case.

CONFIGURING THE DA Wi-Fi SLED

DA50N CONFIGURATION

When using the Wi-Fi Sled in your installation verify wireless connectivity through the GUI Summary page after logging into the DA70 Controller:

– Configuration: **Access Point** / **Station** / Disabled
– SSID: Broadcast or connected SSID
– IP Address: Populated with static or DHCP-issued IP address per configuration, or "N/A" if unavailable.

A "Configuration" of "Access Point" or "Station" indicates an active Wi-Fi interface.

If "Configuration" is "Disabled" browse to Network → Interfaces → Wi-Fi (WLAN), select the Sled Slot for the DA Wi-Fi Sled, configure the interface per your network requirements, and press "Apply."

For further configuration and troubleshooting information, please refer to the DA70 Controller Software Manual for troubleshooting steps at www.redlion.net/support/documentation.

DA50D or DA70D CONFIGURATION

The Wi-Fi Sled is configured using Crimson 3.1 (or later) software. After selecting the Wi-Fi Sled, configure the driver for Wi-Fi Client and enter the appropriate Network Name and Logon Password. Find additional information in the Crimson 3.1 User Manual.

SLED LEDs

STATUS (STS) – SLED Status LED

The Status LED is a bi-color LED that provides information regarding the state of the sled's communication connection with the controller. The status is described below.

COLOR	STATUS
Off	No power to the unit
Green	Sled is powered and application is started.
Orange	Firmware is being updated.

Wi-Fi MODE AND SIGNAL LEDs

MODE

COLOR	STATUS
Off	Wi-Fi interface is off
Solid Green	Client/STA Mode
Solid Orange	AP Mode
Solid Red	Configuration or HW error

SIGNAL

COLOR	AP MODE	STA/CLIENT MODE
Off	Not active	Not connected
Solid Green	Active	Connected

RED LION CONTROLS TECHNICAL SUPPORT

If for any reason you have trouble operating, connecting, or simply have questions concerning your new DA Wi-Fi sled, contact Red Lion's technical support.

Support: support.redlion.net
Website: www.redlion.net
Inside US: +1 (877) 432-9908
Outside US: +1 (717) 767-6511

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