Power Options

Indoor use with AC power available
The N6841A-SP1 power supply will source the needed DC power to the RF Sensor with an input of either 110/120 or 220/240 VDC at 50 or 60 Hz. This supply is rated for use only where it and the RF Sensor are both installed indoors in a dry location.

Outdoor use with AC power available
In all cases, these two approaches can be used:

- Cable solution.

  If AC power is available from a protected area with a building penetration, a safety agency listed, outdoor rated power supply must be used in the protected area with an extended length DC power cable and connector. If the power supply is sourcing 24 VDC Nominal (21 VDC minimum), 18 AWG (0.75 mm²) cable runs up to about 100 meters will supply adequate voltage and current to the N6841A. If a 15 V DC source is used, a cable run with 16 AWG (1.5 mm²) conductors can go up to roughly 30 meters. One extra power supply connector is provided with each Keysight RF Sensor. Detailed instructions for making the power cable are included in the N6841A Installation Guide (CLICK All Programs > Keysight RF Sensor > Documents > Installation Guide).

- Power supply collocated with Sensor solution.

  When installing the outdoor power supply with the RF Sensor, pay particular attention to the specified operating temperature limits and IP rating of the product. A safety agency listed, outdoor rated power supply must be used. There are a number of outdoor rated power supplies suitable for application with the N6841A.

The Meanwell CLG-60-24 is an option. It supplies 2.5 A at 16.8 to 24 VDC and is rated at 60 W. It is designed to IP67 for outdoor application and has a UR safety marking. All components which bear the UL Recognized Marking are under UL's Follow-Up Service (FUS) program. UL's FUS Program verifies that these components which bear the UL Recognized Marking continue to be manufactured in compliance with UL's safety requirements.
Battery Operation

For cases in which no power is available, the N6841A RF Sensor can be operated for about nine hours on a single battery charge using the UltraLife Model UBBL02 Lithium Ion battery. It sources 13.3 Ampere Hours at 15 or 30 VDC. For application with the N6841A, configure the battery to source 15 VDC through cable CA0007. This cable has two conductors that need to be soldered to the Switchcraft power connector provided with the RF Sensor. Be careful to follow the polarity convention as shown in the N6841A Installation Guide.

IF THE BATTERY IS NOT CURRENT LIMITED A FUSE IS NECESSARY

Also, a choice of battery chargers is available. The CH0002 is a Desktop one unit charger.

For more information, visit UltraLife's Customer Care Center https://cc.ulbi.com/ecomerce/ and enter UBBL02 in the Product Search window.