



Ceiling Mount  
Motion Sensor

Model: mFi-MS-C

QUICK START GUIDE

## Introduction

Thank you for purchasing the Ubiquiti Networks® mFi® Ceiling Mount Motion Sensor. This sensor is designed for use with the mFi mPort. Once they are connected, you can use the mFi Controller software to monitor your sensors using your web browser.

## Package Contents



mFi Ceiling Mount  
Motion Sensor



Mounting Bracket



M3x50 Flat Head  
Screws (Qty. 3)



M3 Keps Nuts  
(Qty. 3)



M3x12 Washers  
(Qty. 3)



3 x 20 mm Drywall  
Screws (Qty. 3)



M6x30 Screw Anchors  
(Qty. 3)



Jumpers  
(Qty. 2)



Quick Start  
Guide

## Installation Requirements

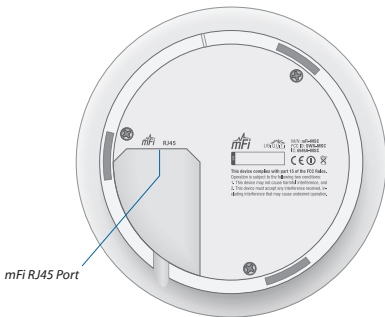
- mFi mPort
- CAT5/6 Cable
- Phillips Screwdriver
- Optional: Drill and Drill Bit (1.6 mm for M3x50 Flat Head Screws or 6 mm for 3x 20 mm Drywall Screws)

## Hardware Overview

### Front



## Back



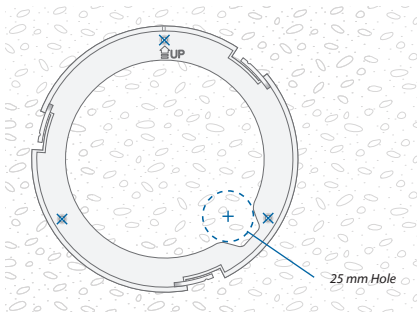
# Hardware Installation

## Installation Tips

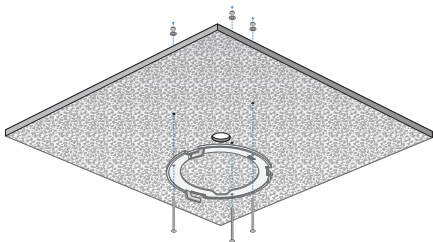
- Avoid installing the mFi-MSC in areas where it will face direct or reflected sunlight.
- Avoid installing the mFi-MSC in areas where the environmental temperature may change rapidly.
- Locate the mFi-MSC at least one meter away from the nearest fluorescent light to avoid interference.
- Ensure there are no obstructions in the field of view.
- The CAT5/6 cable can come out the back or the side, so it can be installed on any type of ceiling. If you are mounting the mFi-MSC on a ceiling tile, remove the tile from the ceiling before installation.

## Instructions

1. If you have a dropped ceiling, remove the ceiling tile.
2. Position the *Mounting Bracket* in the desired location. Mark the three screw holes. If the CAT5/6 cable is wired above the ceiling, mark a 25 mm hole as indicated below.

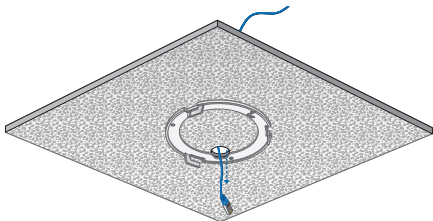


3. Use a 1.6 mm drill bit to pre-drill holes for the screws.
4. If the CAT5/6 cable is wired above the ceiling, cut or drill the 25 mm circle you marked in step 2. This will be used to feed the CAT5/6 cable through the ceiling.
5. Secure the *Mounting Bracket* to the ceiling using the *M3x50 Flat Head Screws*, *M3 Washers*, and *M3 Keps Nuts*.

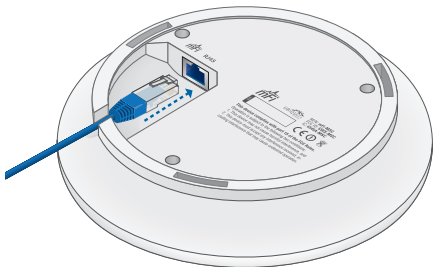


**Note:** If you have a drywall ceiling, use the 3 x 20 mm *Drywall Screws* and *M6x30 mm Screw Anchors*.

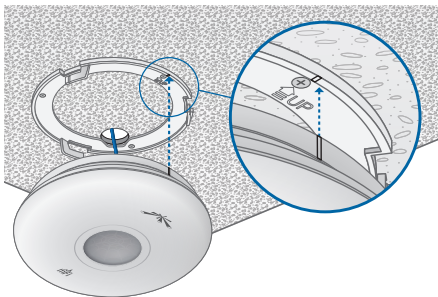
6. If you have a wiring hole in the ceiling, feed the CAT5/6 cable through the *Mounting Bracket* and wiring hole. Seal the cable hole with a sealant, such as RTV (Room Temperature Vulcanizing).



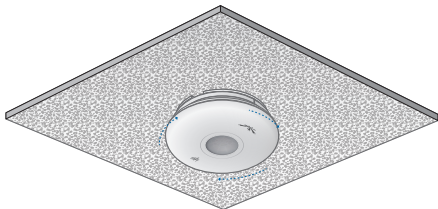
7. Connect the CAT5/6 cable to the *mFi RJ45 Port* of the *mFi-MS-C*.



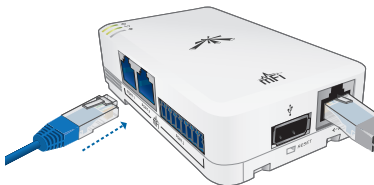
8. Align the notch on the *mFi-MS-C* with the notch on the *Mounting Bracket*.



9. Turn the mFi-MSC clockwise until it locks into place.



10. Connect the other end of the CAT5/6 cable from the mFi-MSC to an mFi RJ45 port on the mFi mPort.



Refer to the User Guide for instructions on configuring the mFi-MSC in the mFi Controller software. The User Guide is available at [www.ubnt.com/mfi](http://www.ubnt.com/mfi)

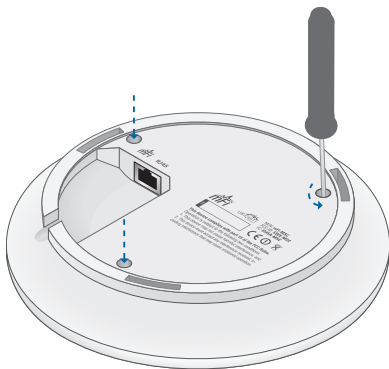


## Microwave Sensitivity Knob

The knob is located inside the product casing. Typically there is no need to adjust the sensitivity of the microwave sensor; however, you can turn the knob counter-clockwise (towards MIN) or clockwise (towards MAX) to make adjustments.





If you need to access the microwave sensitivity knob or jumper settings (see the *Jumper Settings* section), remove the back panel. Use a Phillips screwdriver to remove the three screws.



## Jumper Settings

The mFi-MSC has jumpers located inside the product casing. Typically there is no need to open the casing to adjust the jumpers. The *LED* jumpers are the only ones that you may want to change. You can turn on the *LEDs* so the motion sensor illuminates when it is triggered (see the *LED* section). You can turn on the LEDs permanently or temporarily for walk testing (testing the positioning of the mFi-MSC).




The following jumper settings are available:

Selection	 ON	 OFF
<b>MW (Microwave Sensor)</b> Set to enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
<b>PIR (Passive Infrared Sensor)</b> Set to enabled by default. Removing the jumper will disable this sensor.	Enabled	Disabled
<b>LED</b> The LEDs are off by default.	ON	OFF



## LED

The LEDs are disabled by default and can only be enabled by opening the product case and adjusting the jumper. When the LEDs are enabled, the motion sensor will illuminate in one of the following colors when motion is detected.

Color	Detection
	Indicates that the microwave sensor detected motion.
	Indicates that the infrared sensor detected motion.
	Indicates that an alarm was triggered because the infrared sensor and microwave sensor both detected motion.

## Specifications

mFi Ceiling Mount Motion Sensor	
Dimensions	134.5 x 134.5 x 30.5 mm
Weight	136 g
Warm Time	2 Minutes
RF Immunity	10V/m at 80 MHz to 2 GHz
Angle of Overview	360°
Cone of Detection	110° Wide Angle
Port	(1) mFi RJ45
Mounting	Ceiling-Mount Bracket (Included)
Mounting Height	Up to 4.5 m (15 ft.)
Operating Temperature	0 to 50° C
Operating Humidity	5 to 95% Noncondensing

## Safety Notices

1. Read, follow, and keep these instructions.
2. Heed all warnings.
3. Only use attachments/accessories specified by the manufacturer.



**WARNING:** Do not use this product in location that can be submerged by water.



**WARNING:** Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

## Electrical Safety Information

1. Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
2. There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.

## Limited Warranty

UBIQUITI NETWORKS, Inc (“UBIQUITI NETWORKS”) warrants that the product(s) furnished hereunder (the “Product(s)”) shall be free from defects in material and workmanship for a period of one (1) year from the date of shipment by UBIQUITI NETWORKS under normal use and operation. UBIQUITI NETWORKS’ sole and exclusive obligation and liability under the foregoing warranty shall be for UBIQUITI NETWORKS, at its discretion, to repair or replace any Product that fails to conform to the above warranty during the above warranty period. The expense of removal and reinstallation of any Product is not included in this warranty. The warranty period of any repaired or replaced Product shall not extend beyond its original term.

## Warranty Conditions

The above warranty does not apply if the Product:

- (I) has been modified and/or altered, or an addition made thereto, except by Ubiquiti Networks, or Ubiquiti Networks’ authorized representatives, or as approved by Ubiquiti Networks in writing;
- (II) has been painted, rebranded or physically modified in any way;
- (III) has been damaged due to errors or defects in cabling;
- (IV) has been subjected to misuse, abuse, negligence, abnormal physical, electromagnetic or electrical stress, including lightning strikes, or accident;
- (V) has been damaged or impaired as a result of using third party firmware;
- (VI) has no original Ubiquiti MAC label, or is missing any other original Ubiquiti label(s); or
- (VII) has not been received by Ubiquiti within 30 days of issuance of the RMA.

In addition, the above warranty shall apply only if: the product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation; all Ethernet cabling runs use CAT5 (or above), and for outdoor installations, shielded Ethernet cabling is used, and for indoor installations, indoor cabling requirements are followed.

## Returns

No Products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from UBIQUITI NETWORKS during the warranty period, and the Products being received at UBIQUITI NETWORKS’ facility freight prepaid in accordance with the RMA process of UBIQUITI NETWORKS. Products returned without an RMA number will not be processed and will be returned freight collect or subject to disposal. Information on the RMA process and obtaining an RMA number can be found at: [www.ubnt.com/support/warranty](http://www.ubnt.com/support/warranty).

## Disclaimer

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## Limitation of Liability

EXCEPT TO THE EXTENT PROHIBITED BY LOCAL LAW, IN NO EVENT WILL UBIQUITI OR ITS SUBSIDIARIES, AFFILIATES OR SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES (INCLUDING LOST PROFIT, LOST DATA, OR DOWNTIME COSTS), ARISING OUT OF THE USE, INABILITY TO USE, OR THE RESULTS OF USE OF THE PRODUCT, WHETHER BASED IN WARRANTY, CONTRACT, TORT OR OTHER LEGAL THEORY, AND WHETHER OR NOT ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## Note

Some countries, states and provinces do not allow exclusions of implied warranties or conditions, so the above exclusion may not apply to you. You may have other rights that vary from country to country, state to state, or province to province. Some countries, states and provinces do not allow the exclusion or limitation of liability for incidental or consequential damages, so the above limitation may not apply to you. EXCEPT TO THE EXTENT ALLOWED BY LOCAL LAW, THESE WARRANTY TERMS DO NOT EXCLUDE, RESTRICT OR MODIFY, AND ARE IN ADDITION TO, THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE LICENSE OF ANY SOFTWARE (EMBEDDED IN THE PRODUCT) TO YOU. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to any transactions regarding the sale of the Products.

## Compliance

### FCC

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 Canada.

Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de façon que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

Cet appareil est conforme à la norme RSS Industrie Canada exempts de licence norme(s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Cet appareil ne peut pas provoquer d'interférences et
2. Cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.

## RF Exposure Warning

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.

Les antennes utilisées pour ce transmetteur doivent être installées en considérant une distance de séparation de toute personnes d'au moins 20 cm et ne doivent pas être localisées ou utilisées en conflit avec tout autre antenne ou transmetteur.

## CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

## Alert Sign (!) Follows CE Marking

Alert sign must be indicated if a restriction on use applied to the product and it must follow the CE marking.





## RoHS/WEEE Compliance Statement



### English

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

### Deutsch

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist, nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltsmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

## Español

La Directiva 2002/96/CE de la UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

## Français

La directive européenne 2002/96/CE exige que l'équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiqués par le gouvernement et les pouvoirs publics des collectivités territoriales. L'élimination et le recyclage en bonne et due forme ont pour but de lutter contre l'impact néfaste potentiel de ce type de produits sur l'environnement et la santé publique. Pour plus d'informations sur le mode d'élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l'endroit où vous avez acheté le produit.

## Italiano

La direttiva europea 2002/96/EC richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull'imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per la salute dell'essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.

# Declaration of Conformity

Česky [Czech]	UBIQUITI NETWORKS tímto prohlašuje, že toto UBIQUITI NETWORKS zařízení, je ve shod se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
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Nederlands [Dutch]	Hierbij verklaart UBIQUITI NETWORKS, dat deze UBIQUITI NETWORKS apparaat, in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EC.
English	Hereby, UBIQUITI NETWORKS, declares that this UBIQUITI NETWORKS device, is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Eesti [Estonian]	Käesolevaga UBIQUITI NETWORKS kinnitab, et antud UBIQUITI NETWORKS seade, on vastavus olulistele nõuetele ja teistele asjakohastele sätetele direktiivi 1999/5/EÜ.
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Ελληνική [Greek]	Δια του παρόντος, UBIQUITI NETWORKS, δηλώνει ότι αυτή η συσκευή UBIQUITI NETWORKS, είναι σε συμμόρφωση με τις βασικές απαιτήσεις και τις λοιπές σχετικές διατάξεις της οδηγίας 1995/5/EK.
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Italiano [Italian]	Con la presente, UBIQUITI NETWORKS, dichiara che questo dispositivo UBIQUITI NETWORKS, è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti della direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo, UBIQUITI NETWORKS, deklarē, ka UBIQUITI NETWORKS ierīce, ir saskaņā ar būtiskajām prasībām un citiem attiecīgiem noteikumiem Direktīvā 1999/5/EK.
Lietuviškai [Lithuanian]	UBIQUITI NETWORKS deklaruoja, kad šis UBIQUITI NETWORKS įrenginys atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

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Community [community.ubnt.com](http://community.ubnt.com)

Downloads [downloads.ubnt.com](http://downloads.ubnt.com)



[www.ubnt.com](http://www.ubnt.com)