



# Powerline MU Inductive Couplers Release 1

## Release Notes

PowerlineMUInducCoup1RN-en  
Release 1  
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*MOTOWi*<sup>4</sup>





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# 1 INTRODUCTION

In future issues, this section will identify features, descriptions, and revisions that are new since the last previous issue of this document.

## 1.1 SENDING FEEDBACK

We welcome your feedback on Canopy<sup>®</sup> system documentation. This includes feedback on the structure, content, accuracy, or completeness of our documents, and any other comments you have. Send your comments to [technical-documentation@canopywireless.com](mailto:technical-documentation@canopywireless.com).

## 1.2 GETTING ADDITIONAL HELP

Help is available for problems with supported products and features. See the Knowledge Base section at [www.canopywireless.com](http://www.canopywireless.com).

## 2 DESCRIPTION AND OPERATION OF FEATURES

Powerline MU Inductive Couplers have been tested with and support the following other Powerline products/software releases:

- Powerline MU Gateway, version 1.20 and higher
- Powerline MU Modem, version 1.27 and higher

Powerline MU Inductive Couplers were designed to work properly with the Powerline MU Gateway. The couplers are available in the following sizes. Couplers should fit snugly against the electrical cables.

**Column A** lists the American Wire Gauge sizes, **Column B** lists Metric Wire Gauge sizes, and **Column C** measures the outer diameter of the electric wire installed in the building. Use that information to choose the recommended Powerline MU Inductive Coupler from **Column D**. **Column E** lists the inner diameter (the ferrite core) of the Powerline MU Inductive Coupler and **Column F** provides the part number for that coupler.

### Conductor/Coupler Chart

Column A Conductor Size (American Wire Gauge)	Column B Conductor Size (Metric Wire Gauge, mm <sup>2</sup> )	Column C Approx Conductor Outer Diameter With Insulation (mm)	Column D Recommended Powerline MU Inductive Coupler	Column E Powerline MU Coupler Inner Diameter (mm)	Column F Motorola Part Number
-	400	30.1	750*	31	TBD*
750 MCM	-	29.4	750*	31	
700 MCM	-	28.5	750*	31	
600 MCM	-	26.7	750*	31	
	300	26.5	750*	31	
500 MCM	-	24.9	500	25.4	0171486N21
-	240	24.2	500	25.4	
400 MCM	-	22	500	25.4	
-	185	21.1	500	25.4	
350 MCM	-	20.6	500	25.4	
300 MCM	150	18.5	500	19.4	
250 MCM	-	17.8	250	19.4	0171486N23
-	120	17.5	250	19.4	
4/0	-	16	250	19.4	
-	95	15.4	250	19.4	
3/0	-	14.7	250	19.4	
-	70	13.7	100	14	0171486N22
2/0	-	13.5	100	14	
1/0	-	12.2	100	14	
-	50	12	100	14	

\*Powerline MU Inductive Coupler 750 available Q4, 2007.

**2.1 POWERLINE MU INDUCTIVE COUPLERS FEATURES**

- Receives Ethernet signal from the Powerline MU Gateway via coaxial cable
- Delivers Ethernet signal via coaxial cable to electrical cables

**2.2 POWERLINE MU INDUCTIVE COUPLERS UL AUTHORIZATION**

Powerline MU Inductive Couplers have UL authorization when used with the Powerline MU Gateway.

**2.3 POWERLINE MU INDUCTIVE COUPLERS INSTALLATION**

The Powerline MU Inductive Couplers are designed to be installed in multiple unit buildings to provide connection from the Powerline MU Gateway into the electrical distribution cabinet.

Installation is accomplished via the coaxial connector on the Powerline MU Gateway, using a 75-coaxial cable from the Gateway to a bi-directional coaxial splitter and Powerline MU Inductive Couplers from the splitter to EACH phase of electrical cables. These buildings typically have three phases, requiring a 3-way splitter and three Powerline MU Inductive Couplers. The *Powerline MU User Guide*, version 3.0 and later, includes instructions for installing Powerline MU Inductive Couplers and requirements for the coaxial cable and splitter.

**dB Loss Chart**

Number of Splits	Maximum dB loss per split
2-way	-3.5
3-way	-5.7
4-way	-7.5

***Note: There is no software or management for the inductive couplers.***

**Powerline MU Inductive Couplers should be installed by a qualified electrician.**

### **3 KNOWN ISSUES**

#### **3.1 ISSUES RESOLVED WITH THIS SOFTWARE RELEASE**

This is the first version of the Powerline MU Inductive Couplers, so there are no resolved issues. Powerline MU Inductive Couplers have no software or management capabilities.

#### **3.2 KNOWN ISSUES**

There are no severity 1 or 2 issues in this release.

## **4 SOFTWARE INSTALLATION AND SETUP**

### **4.1 PREPARING FOR THE INSTALLATION**

Powerline MU Inductive Couplers have no software or management.

For information about installing the Powerline MU Inductive Couplers, see

*Powerline MU User Guide, Version 3.0* (and later)

*Building Questionnaire and Troubleshooting Guide*

## APPENDIX A: NOTICES

### TRADEMARKS

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