

rfid as a feature



## SkyePlus MXU



860-960MHz UHF Multiplexer

### APPLICATIONS:

- Retail Item-Level Management
- Manufacturing Lines
- Other Multiple Read-Point Applications

### FEATURES:

- Low Insertion Loss
- Configurable as 4 Way or 8 Way
- Added Flexibility
- Excellent Signal Integrity
- Fast Switching Speed

### BENEFITS:

- Robust Signal Processing
- Straightforward Customization
- 360° Spatial Diversity
- Minimize Reader Deployment Costs

### Product Overview

The SkyePlus™ MXU expands a UHF reader's capability by adding support for up to 8 antennas. Digital control of the MXU is accomplished by either the host processor or reader module allowing any of the 8 antennas to be explicitly addressed using 3 GPIO pins. Additional multiplexers can be added to increase the number of antennas a module can support beyond 8 presenting a scalable solution.

- Low Insertion Loss: <1.4 dB
- Isolation: 30 dB
- Control Voltage: CMOS or TTL Levels

### About SkyePlus MXU

The MXU can be equipped with 4 or 8 antenna ports depending on the application requirements. Infrastructure costs are reduced by using the MXU to minimize the number of readers required to support multiple read-points.

### Electrical Specifications

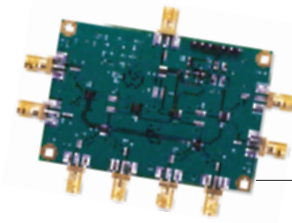
Parameter	Frequency	Min	Typ	Max	Units
Insertion Loss	860-960 MHz		1	1.4	dB
Isolation	860-960 MHz	28	30		dB
Return Loss	860-960 MHz		22		dB

### Applications

The SkyePlus MXU, used in conjunction with a SkyeTek UHF reader, eases integration efforts for those devices requiring multiple read-points by eliminating the need for multiple modules in such applications as:

- Retail Item-Level Management
- Manufacturing Lines
- Other Multiple Read-Point Applications

The MXU compliments SkyeTek UHF Tagnostic® reader technology which is offered in a variety of form factors making it easy to embed in any device.



## SkyPlus MXU Specifications

### About Skyetek:

SkyeTek, Inc., maker of ReaderWare™ is the leading supplier of RFID reader software and reference designs that enable the pervasive adoption of RFID technology. SkyeTek's Tagnostic™ reader technology works with most industry standard tags and smart labels, its low power requirements and a small form factor make it the optimal choice for embedding into new or existing products. SkyeTek's RFID reader technology is available in several formats including reader modules, hardware reference designs, and the ReaderWare™ software suite. SkyeTek markets to OEM customers in targeted vertical markets with several high-volume licensing options available. For more information about SkyeTek, visit [www.skyetek.com](http://www.skyetek.com) or call 720-565-0441.

SkyeTek is based in Colorado.  
Our Address: 11030 Circle Point Road  
Ste 300, Westminster, CO 80020 USA

### Physical Characteristics

Dimensions (LxWxH)	95.5x70.4x11.3 mm (Including 8 SMAs)	RF Connections:	50 ohm SMA (input)
Weight	TBD	- 4x Output	50 ohm SMA
		- 8x Output	50 ohm SMA

### Absolute Maximum Ratings

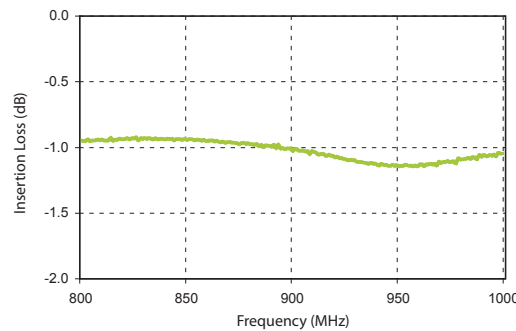
Max Input Power $V_{ctl} = 0/+5V$	860 - 960 MHz	39 dBm
Control Voltage Range (A&B)	-0.2 to +5.5 Vdc	
Hot Switching Power Level $V_{ctl} = 0/+5V$	39 dBm	
Channel Temperature	150° C	
Continuous Pdiss (T = +85° C) (derate 6 mW/°C above 85° C)	0.38W	
Max Allowed switching Capacity	2W	
Thermal Resistance	173°C/W	
Storage Temperature	-65 to 150° C	
Operating Temperature	-40 to +85° C	

### Electrical Characteristics

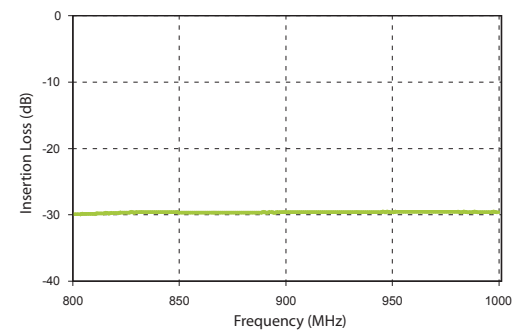
Power Supply	3.2 – 5.5V
Power Consumption	200 $\mu$ A
Operating Frequency	860 - 960 MHz
Digital Inputs	3 inputs 0/3.3V, 0/5V

State	Bias Condition
Low	0 to +0.2 Vdc
High	+3 Vdc +5Vdc

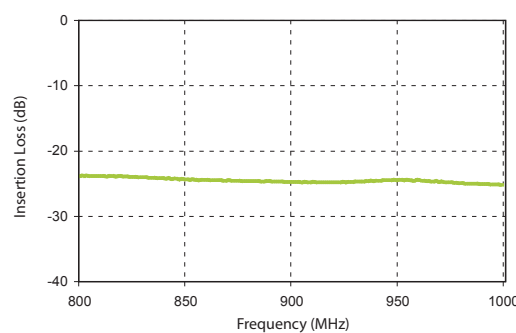
### Insertion Loss



### Isolation



### Return Loss



## Other Offerings from Skyetek

SkyeTek provides a variety of reader technology at both 13.56 MHz (HF) and ~900 MHz (UHF). The M1-Mini, also part of the SkyeModule HF line, offers an even smaller design with comparable features. ReaderDNA is a comprehensive reference design available for component level integration of RFID reader technology, including complete design files, BOM, and test fixtures. ReaderWare, an open-architected software suite residing on all SkyeTek's modules and available with ReaderDNA, provides intelligence to the RFID reader hardware. The SkyeModule M8 is a low power, compact, UHF reader compatible with EPC and ISO transponders. All SkyeModules are controlled via the SkyeTek Protocol, a powerful but simple communication protocol that grants the user access to all features of an RFID transponder. Further, they have been designed with flexible and modular embedded software that allows one to select only the desired features.



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[SkyeTek:](#)

[SP-MX-04-UF-M9](#) [SP-MX-08-UF-M9](#)

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)