

Description: LOW PROFILE MULTIBAND

**ANTENNA** 

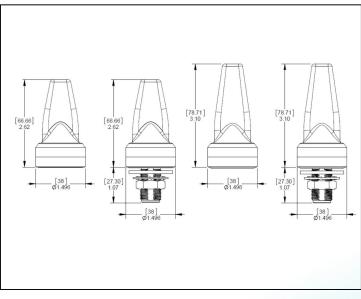
PART NUMBER: ICEFINXXX

**Series: IceFin** 



# Features:

- Transparent clear visually appealing plastic radome
- Short, slim profile without sacrificing RF or mechanical performance
- Direct and NMO mount models
- IP67 Weatherproof



# **Applications:**

- Models supporting :
  - Public Safety, LMR
  - Wi-Fi,
  - 3G/4G LTE.
  - ISM
  - DSRC
- Bus/Rail/Transit
- IoT Vending, metering and other industrial applications
- Outdoor Vehicular

All dimensions are in mm / inches

Issue: 1743

In the effort to improve our products, we reserve the right to make changes judged to be necessary.  $\texttt{CONFIDENTIAL} \ \texttt{AND} \ \texttt{PROPRIETARY} \ \texttt{INFORMATION}$ 

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Description: LOW PROFILE MULTIBAND

**ANTENNA** 

PART NUMBER: ICEFINXXX

**Series: IceFin** 

# This document covers all product variants of the following product family:

Project	Color	Frequency	Size	Fixing System Connector		
ICEFINLNMOHF	Clarity	698-960MHz 1710-2700MHz	78.71 ] 3.10	NMOHF NMO + HF Connector		
ICEFIN698/960NMO	Clarity	750-960MHz	[38] Ø1.496	NMO Pogo Pin Connector		
ICEFIN806NMO	Clarity	806-960MHz				
ICEFIN698/869DMN	Clarity	698-869MHz	[27.30] 1.07 1.07 1.496			
ICEFIN806DMN	Clarity	806-960MHz		DMN		
ICEFINLDMN ue: 1743	Clarity	698-960MHz 1710-2700MHz		Direct Mount + N Female Connector (Screw 5/18-24 UNEF 2A)		





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# This document covers all product variants of the following product family:

Project	Color	Frequency	Size	Fixing System Connector	
ICEFIN24NMOHF	Clarity	2400-2500MHz			
ICEFIN49NMOHF	Clarity	4900-6000MHz	[66.66]		
ICEFINWNMOHF	Clarity	2400-2500MHz 4900-6000MHz	[38] Ø1.496	NMOHF NMO + HF Connector	
ICEFIN24DMN	Clarity	2400-2500MHz			
ICEFIN49DMN	Clarity	4900-6000MHz	[66.66]		
ICEFINWDMN	Clarity	2400-2500MHz 4900-6000MHz	[27.30] 1.07 [38] $\phi_{1.496}$	Direct Mount N Female Connector (Screw 5/18-24 UNEF 2A)	

P.S.: For DMN fixing system, it requires a 5/8" (16mm) hole in the mounting surface.

Remove any burrs, particularly on the Roof under side of the hole. Remove paint in a narrow ring around the hole. Metal-to-metal contact between the mounting surface and mount is essential for best performance.





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# **ELECTRICAL SPECIFICATIONS**

Project	Frequency	VSWR	Peak Gain	Efficiency	Power
				-	Handling
					20W(100%
		3.2:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)			duty cycle)
ICEFINLNMOHF	698-960MHz		2.98dBi(0.698-0.96GHz)	75%	
	1710-2700MHz		3.82dBi(1.71-2.69GHz)	61%	
				01/0	30W(50%
					duty cycle)
					30W(100%
					duty cycle)
		2.2:1	4.5dBi	65%	
ICEFIN698/960NMO	750-960MHz				40W(50%
					duty cycle)
	806-960MHz	2.2:1	2.91dBi		30W(100%
ICEFIN806NMO					duty cycle)
				63%	40W(50%
					duty cycle)
	698-869MHz	2.3:1			5W(100%
					duty cycle)
ICEFIN698/869DMN			2.6dBi	54%	_
			2.0001	34/6	15W(50%
					duty cycle)
					10W(100%
ICEEINIOOCD NAN	806-960MHz	2.2:1	3.7dBi	78%	duty cycle)
ICEFIN806DMN				78%	2014/500/
					20W(50%
					duty cycle) 20W(100%
	698-960MHz 1710-2700MHz	3.2:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)			duty cycle)
ICEFINLDMN					duty tytie)
			3.1dBi(0.698-0.96GHz)	76%	
			5.17dBi(1.71-2.69GHz)	79%	
			,		30W(50%
					duty cycle)





Series: IceFin

#### **TECHNICAL DATA SHEET**

Description: LOW PROFILE MULTIBAND

**ANTENNA** 

PART NUMBER: ICEFINXXX

## **ELECTRICAL SPECIFICATIONS**

Project	Frequency	VSWR	Peak Gain	Efficiency	Power Handling
ICEFIN24NMOHF	2400-2500MHz	2:1	5.2dBi	88%	20W(100% duty cycle)
ICEFIN49NMOHF	4900-6000MHz	2:1	6.2dBi	66%	30W(50% duty cycle) 20W((100% duty cycle) 30W(50% duty cycle)
ICEFINWNMOHF	2400-2500MHz 4900-6000MHz	2:1(2.4-2.5GHz) 2:1(4.9-6GHz)	5.2dBi 6.2dBi	88% 66%	20W(100% duty cycle)
ICEFIN24DMN	2400-2500MHz	2:1	5.2dBi	88%	30W(50% duty cycle) 20W(100% duty cycle)
ICEFIN49DMN	4900-6000MHz	2:1	6.2dBi	66%	30W(50% duty cycle) 20W(100% duty cycle)
	2400-2500MHz	2:1(2.4-2.5GHz)	5.2dBi	88%	30W(50% duty cycle) 20W(100% duty cycle)
ICEFINWDMN	4900-6000MHz	2:1(4.9-6GHz)	6.2dBi	66%	30W(50% duty cycle)

Nominal Impedance  $50\Omega$ 

Radiation Pattern omni

Polarization: Vertical





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# **MECHANICAL SPECIFICATIONS**

Plastic radome PC

Color Clarity

Ingress Protection IP67

### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature

-40 ~ +85° C



Description: LOW PROFILE MULTIBAND

**ANTENNA** 

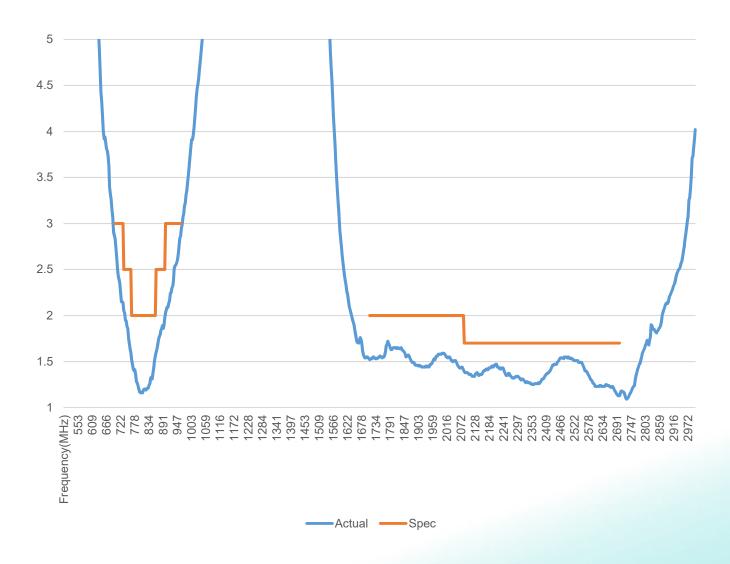
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINLNMOHF VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

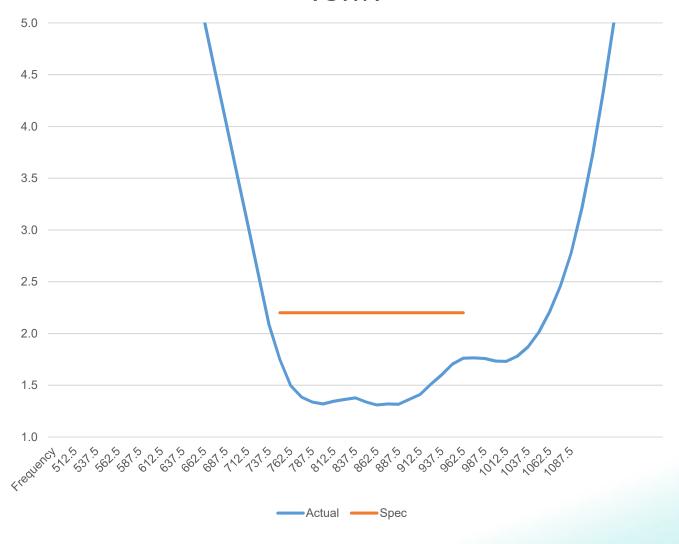
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN698/960NMO VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

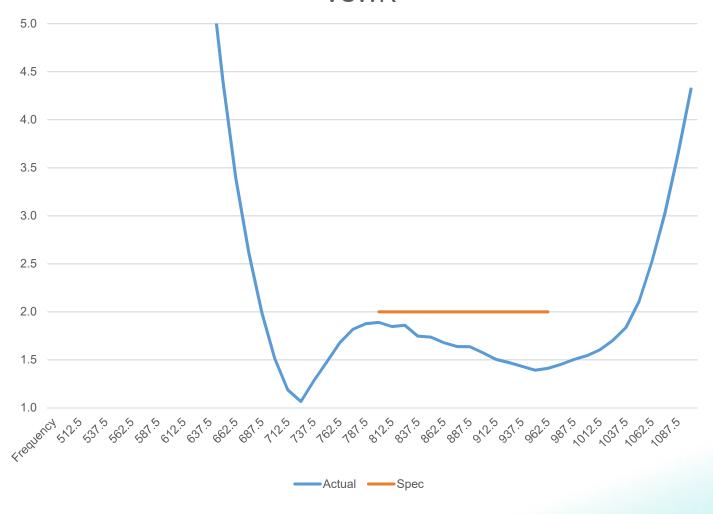
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN806NMO VSWR









**Description: LOW PROFILE MULTIBAND** 

**ANTENNA** 

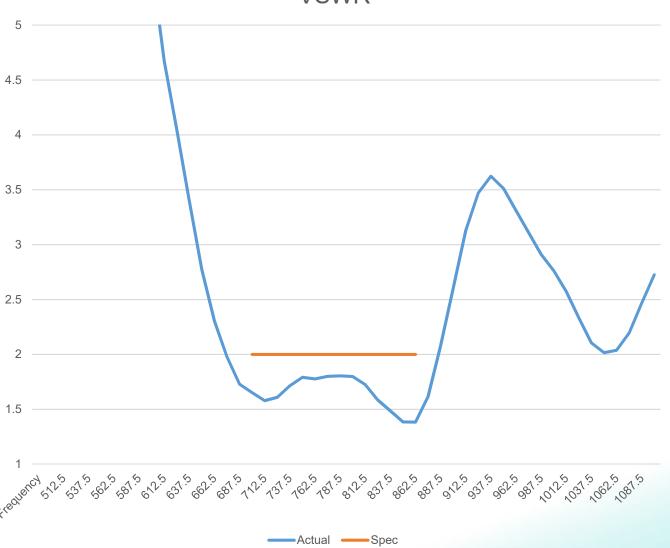
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN698/869DMN VSWR



Issue: 1743

ROHS



Description: LOW PROFILE MULTIBAND

**ANTENNA** 

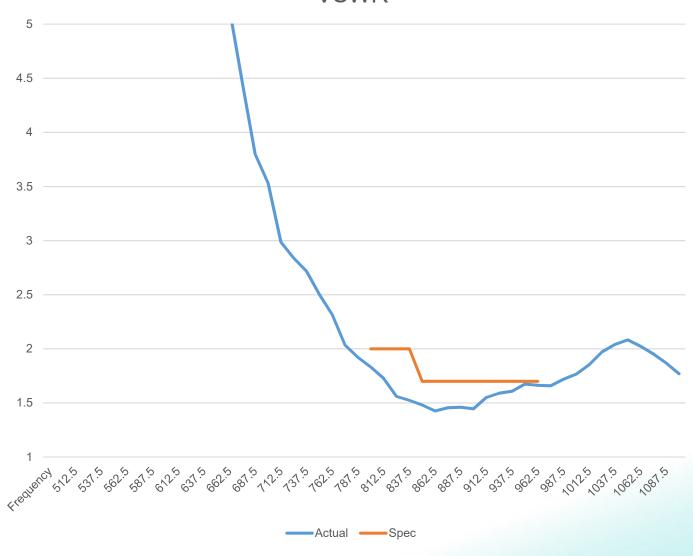
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN806DMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

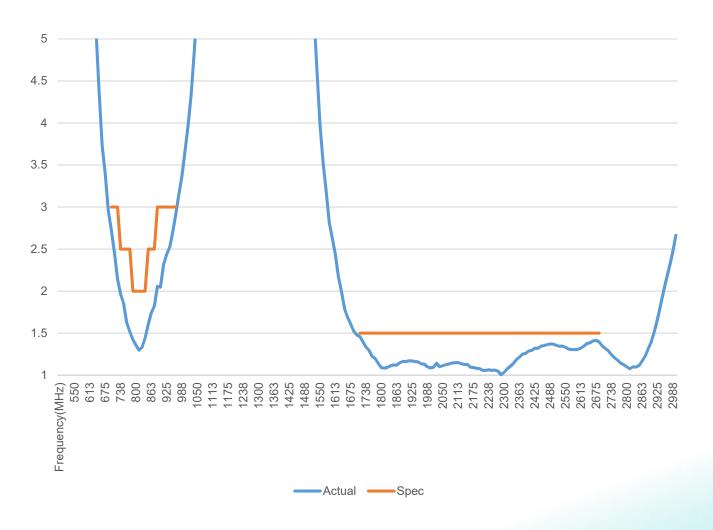
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINLDMN VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

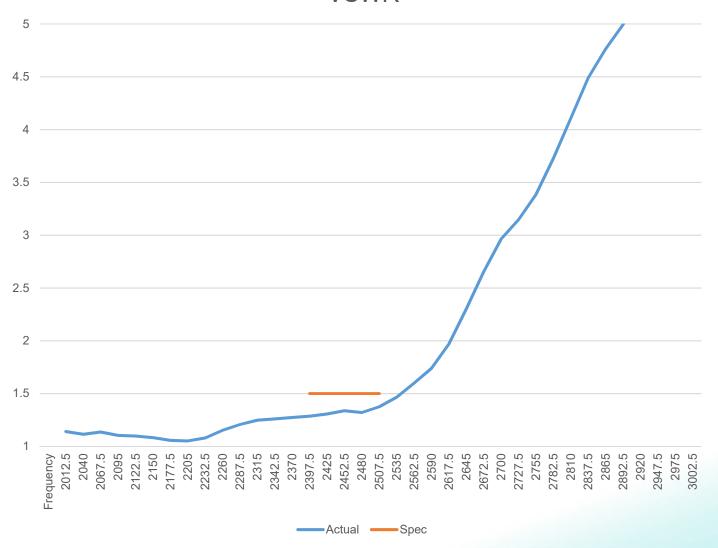
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN24NMOHF VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

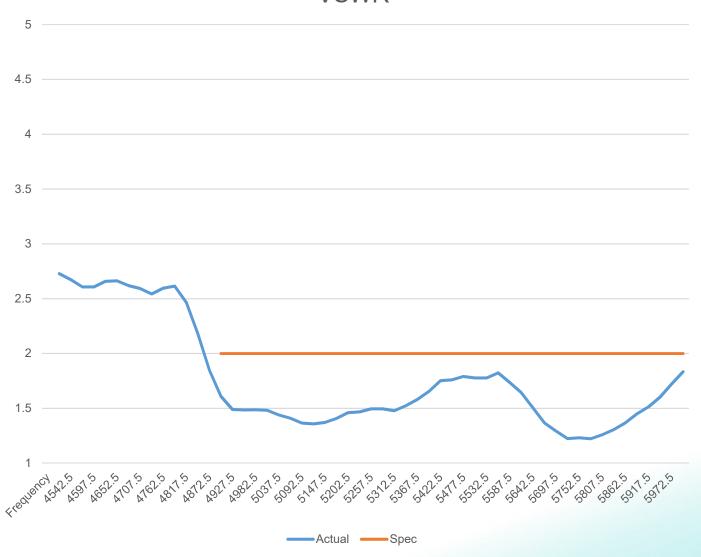
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN49NMOHF VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

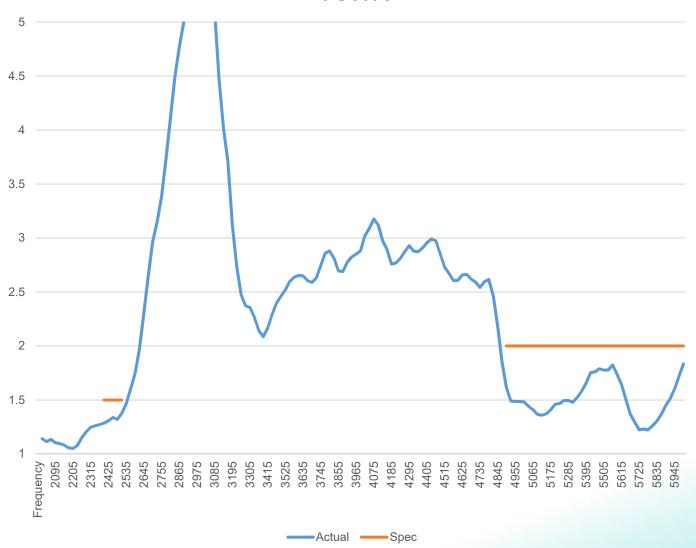
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINWNMOHF VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

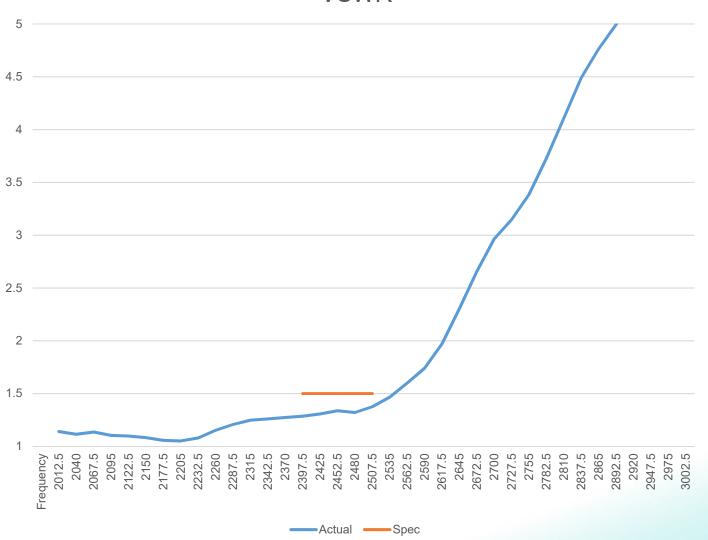
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN24DMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN49DMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

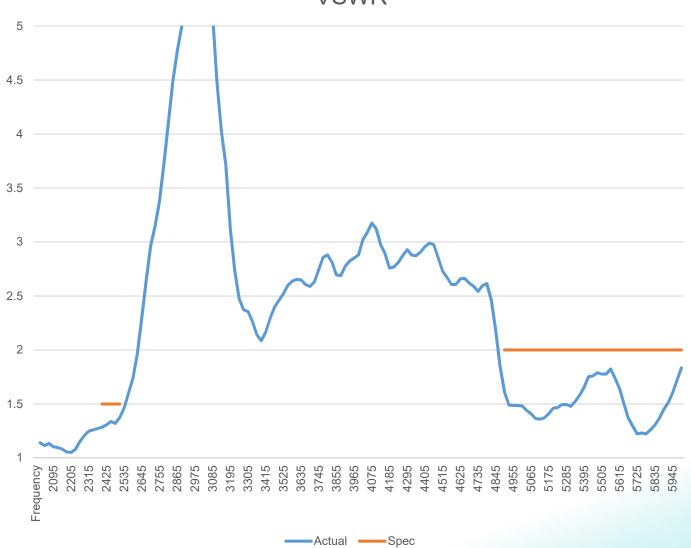
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINWDMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

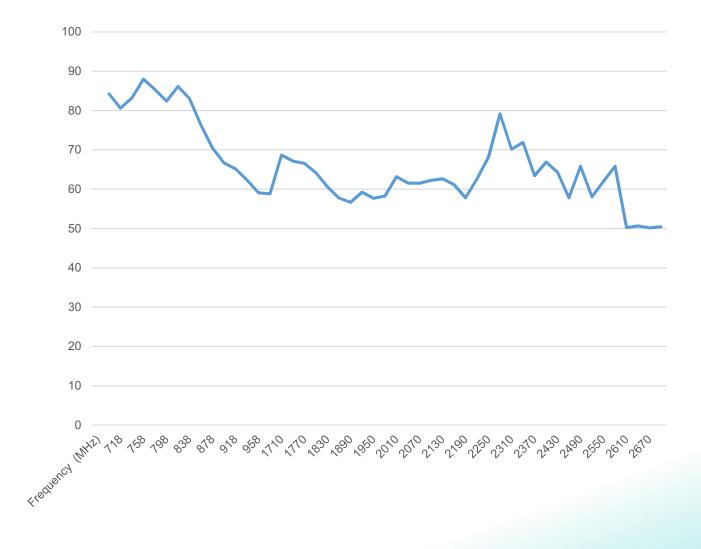
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINLNMOHF Efficiency (%)





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

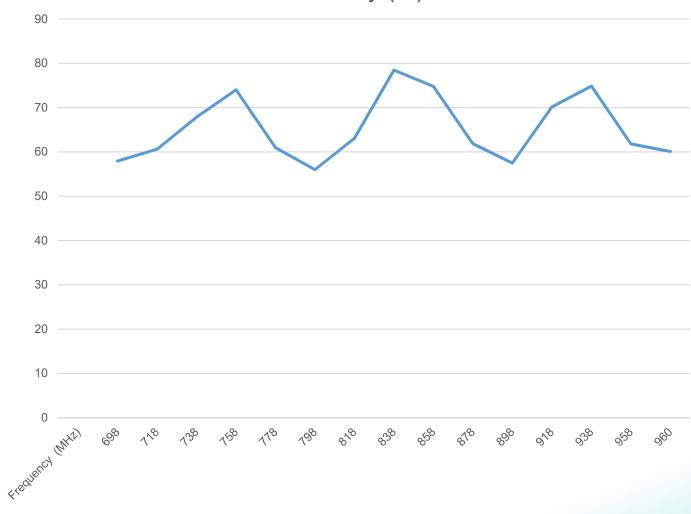
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN698/960NMO Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

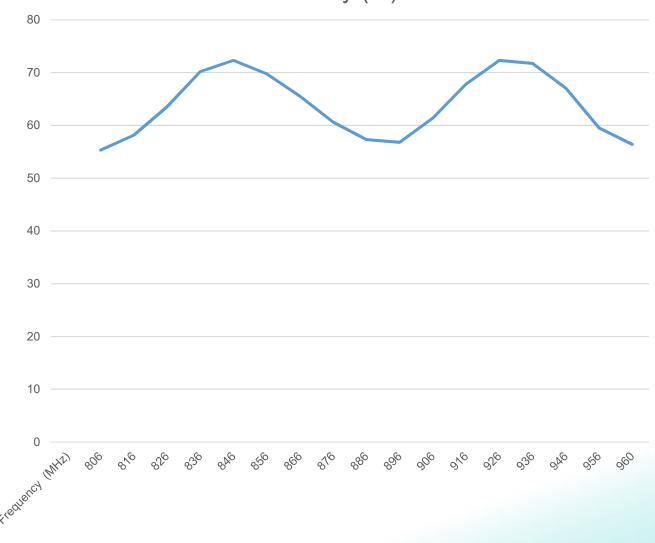
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN806NMO Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

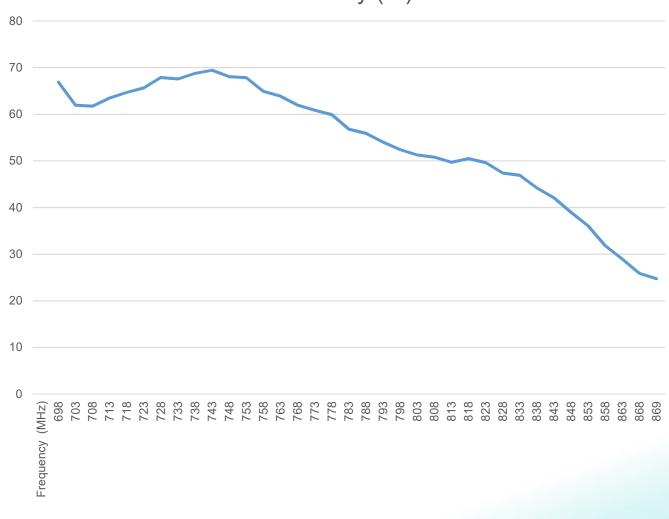
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN698/869DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN806DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

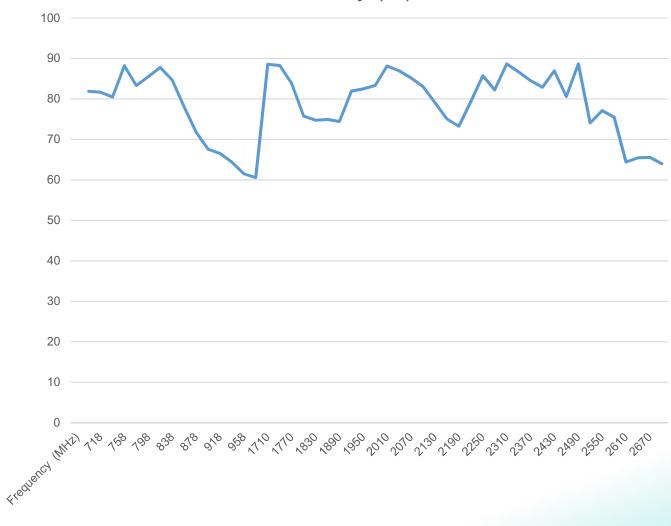
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINLDMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

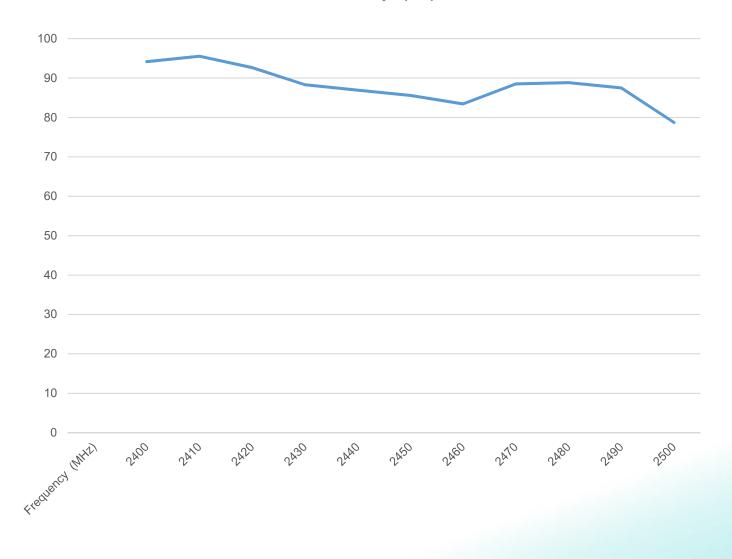
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN24NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

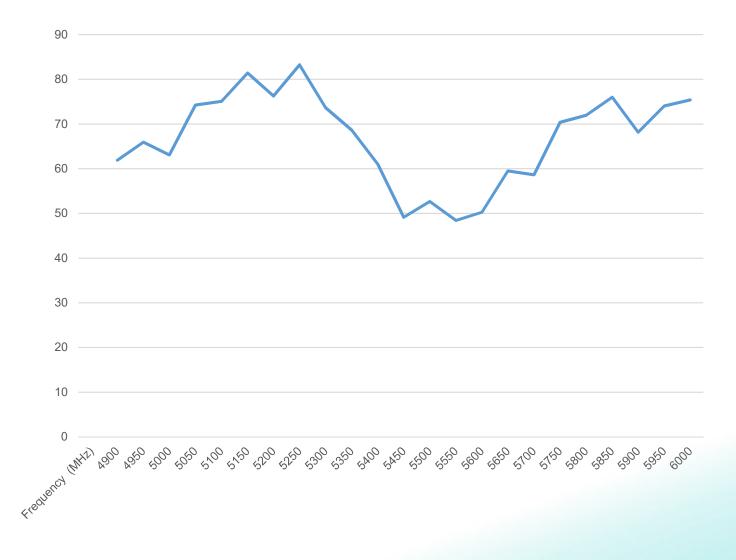
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN49NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

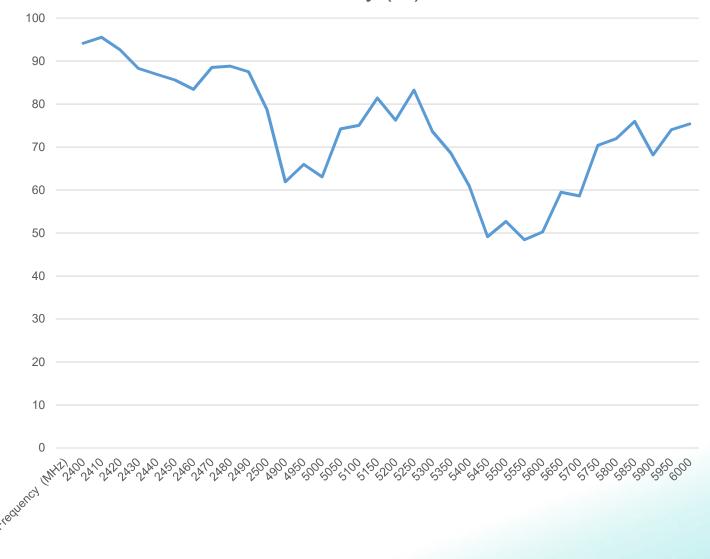
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINWNMOHF Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN24DMN Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

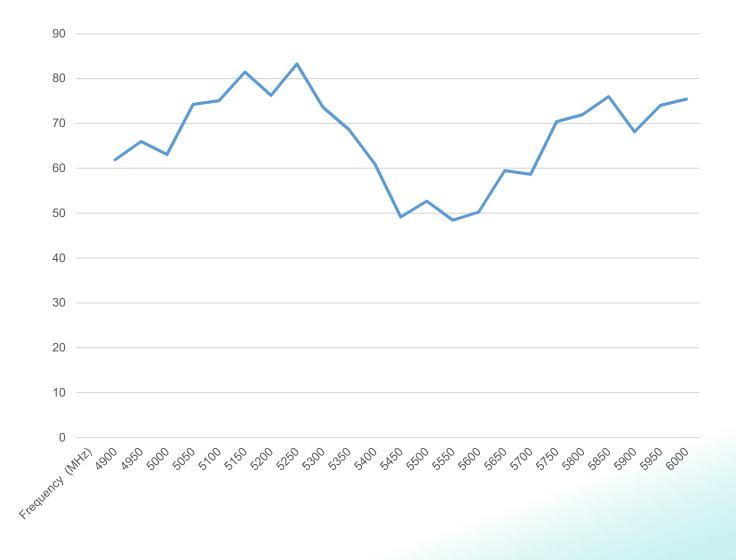
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

ICEFIN49DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

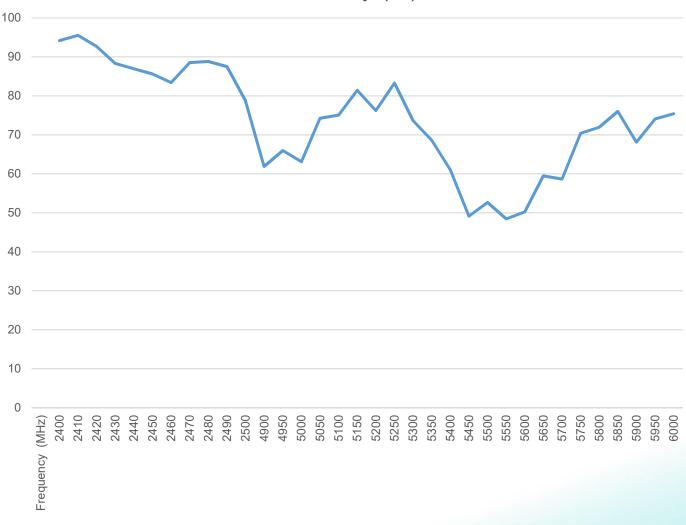
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINWDMN Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

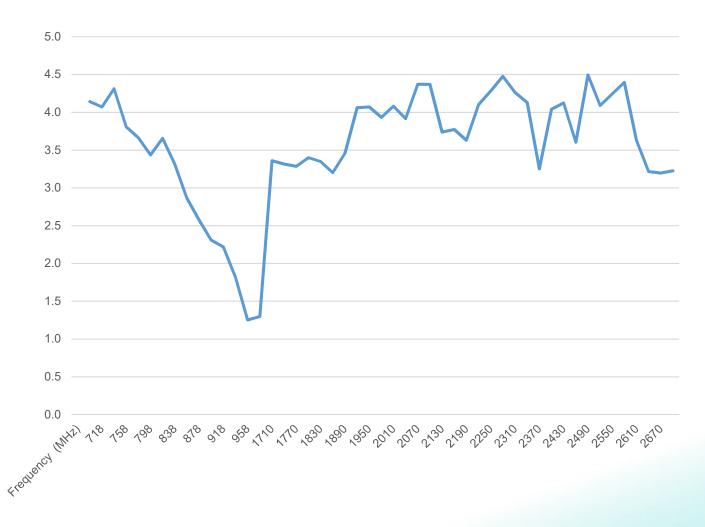
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFINLNMOHF Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

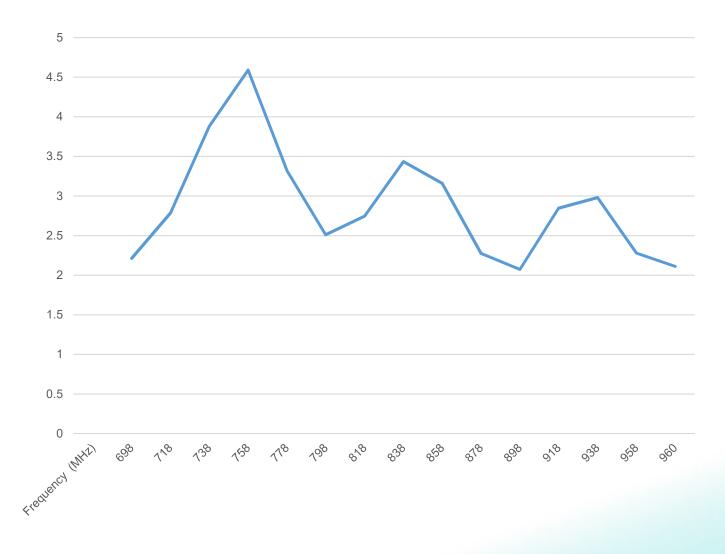
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN698/960NMO Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

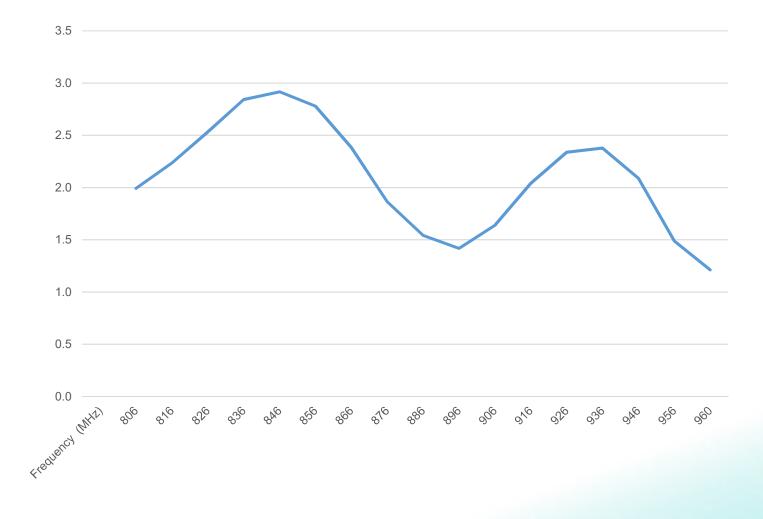
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFIN806NMO Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

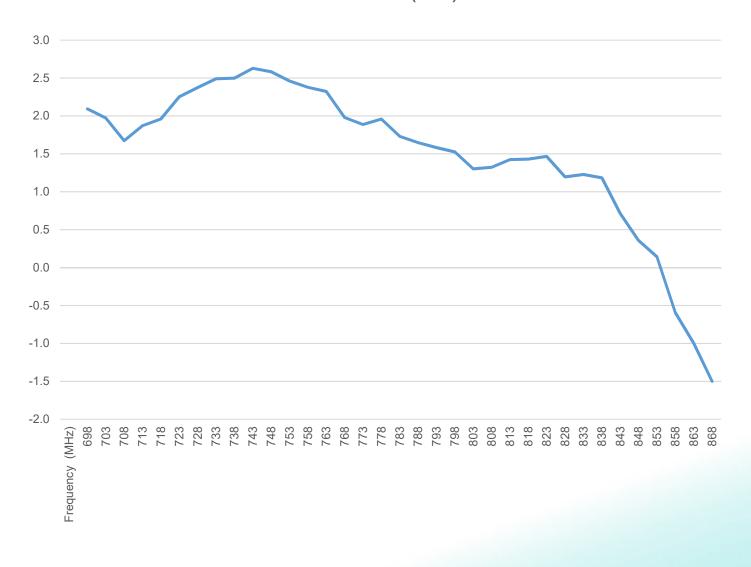
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN698/869DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

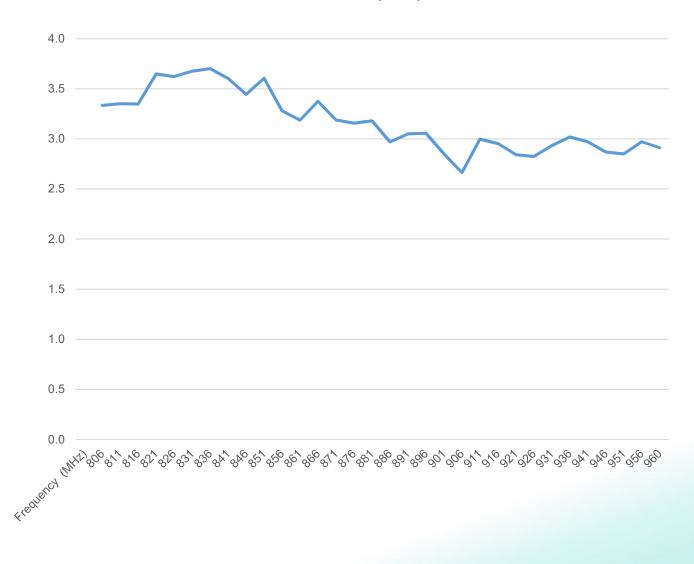
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN806DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

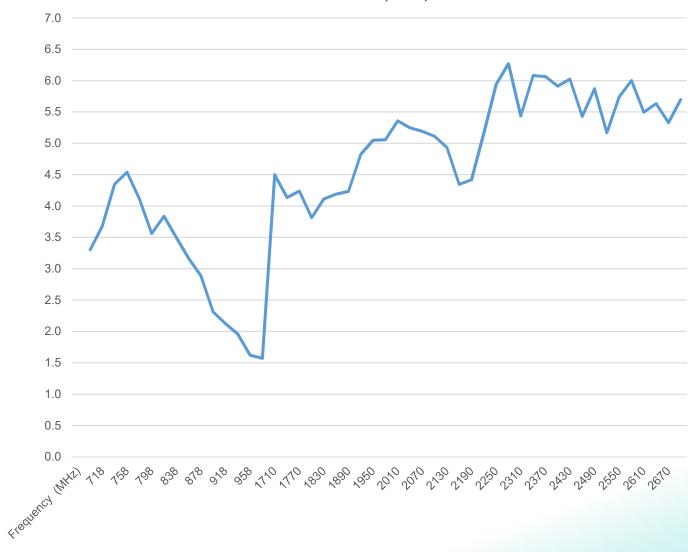
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFINLDMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

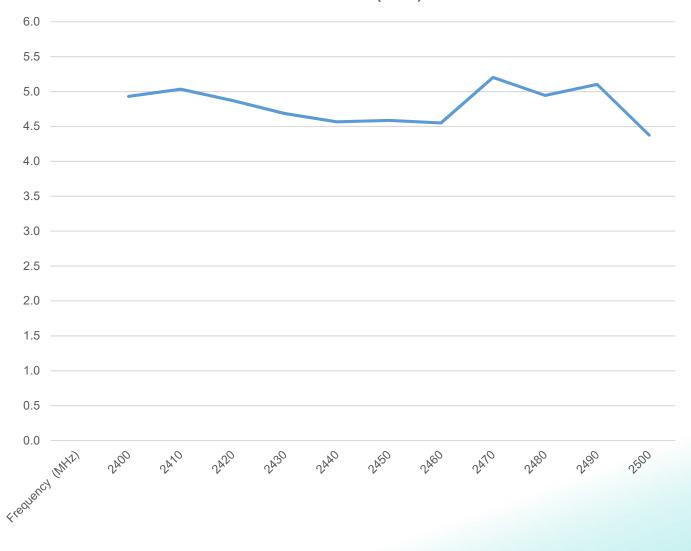
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN24NMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

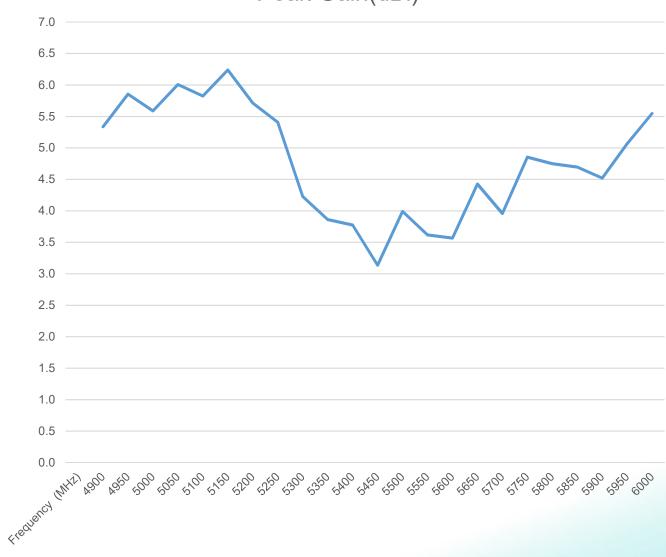
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN49NMOHF Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

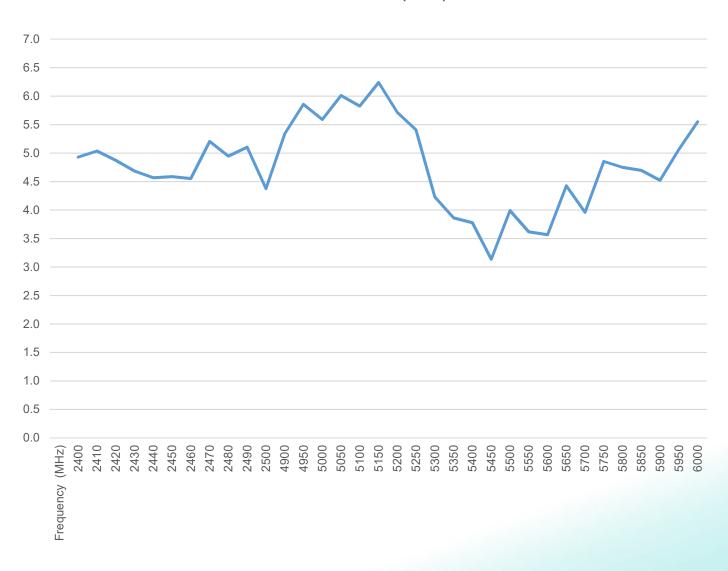
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFINWNMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

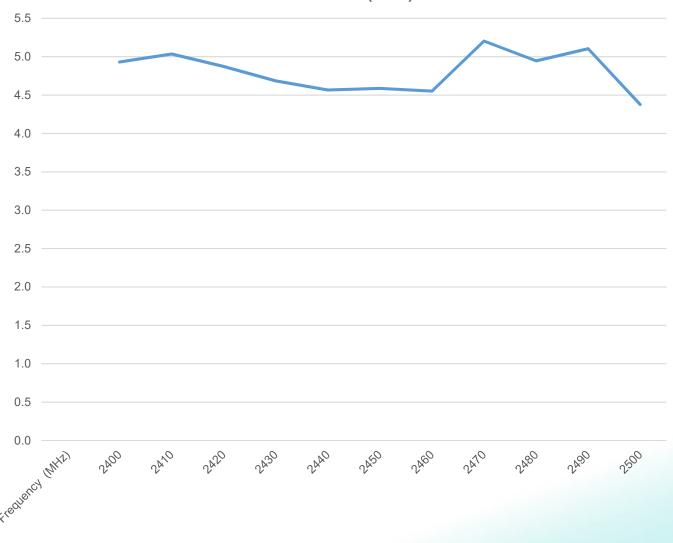
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN24DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

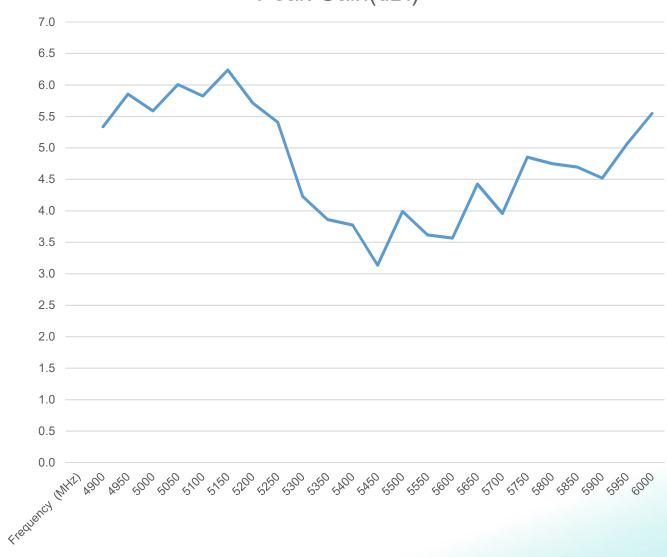
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFIN49DMN Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

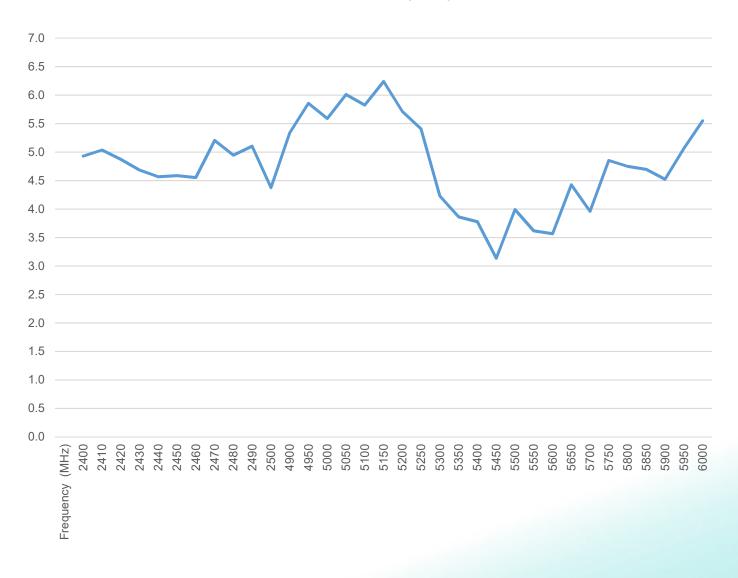
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFINWDMN Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

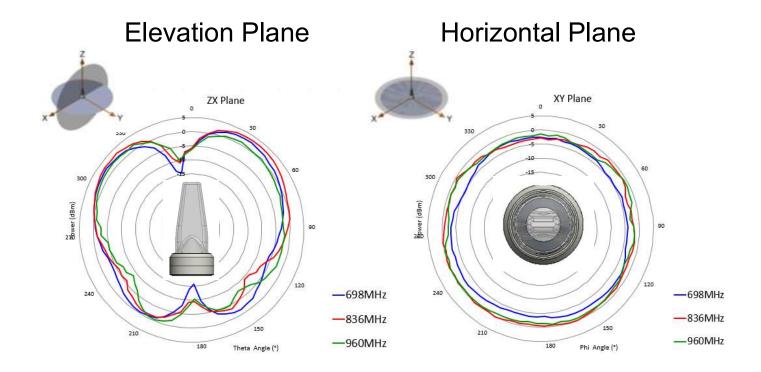
PART NUMBER: ICEFINXXX

Series: IceFin

# **CHARTS**

# Free Space Radiation Pattern

### **ICEFINLNMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

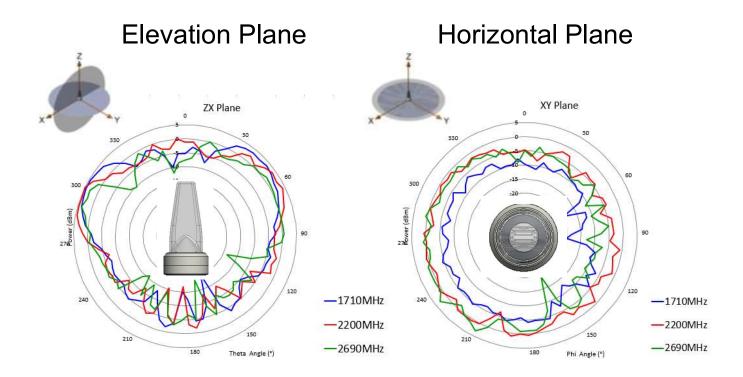
PART NUMBER: ICEFINXXX

Series: IceFin

# **CHARTS**

# Free Space Radiation Pattern

### **ICEFINLNMOHF**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

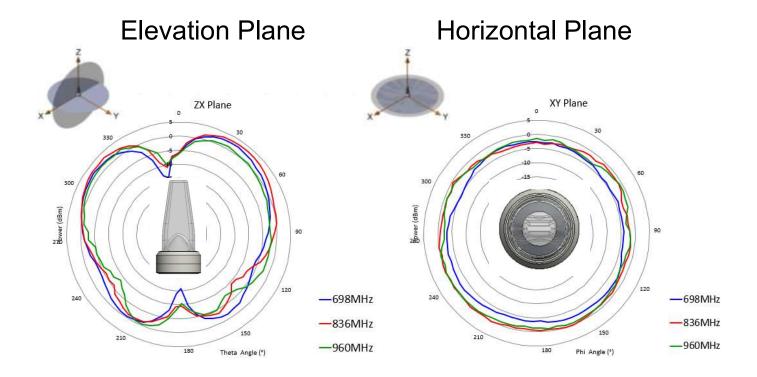
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### ICEFIN698/960NMO









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

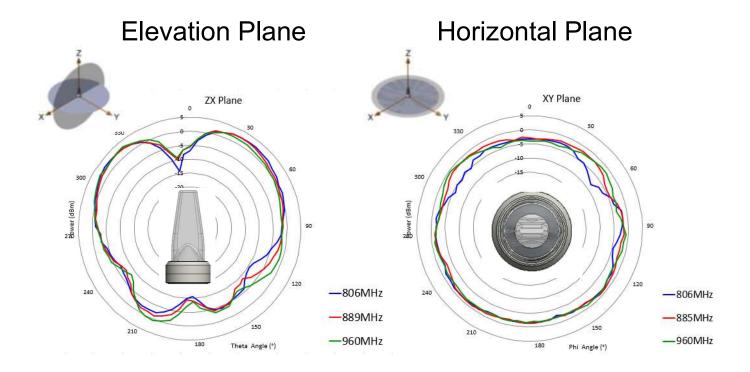
PART NUMBER: ICEFINXXX

Series: IceFin

# **CHARTS**

# Free Space Radiation Pattern

### ICEFIN806NMO









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

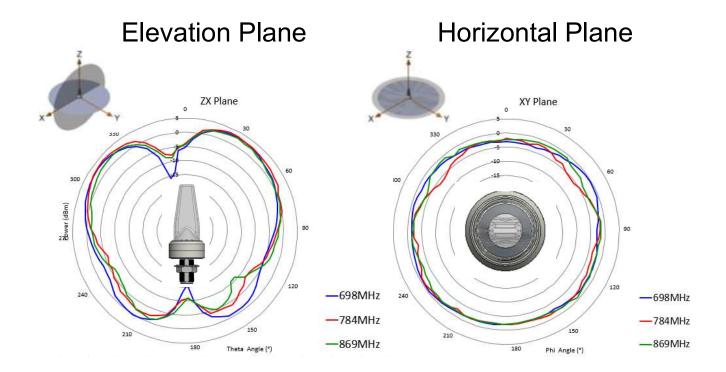
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### ICEFIN698/869DMN





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

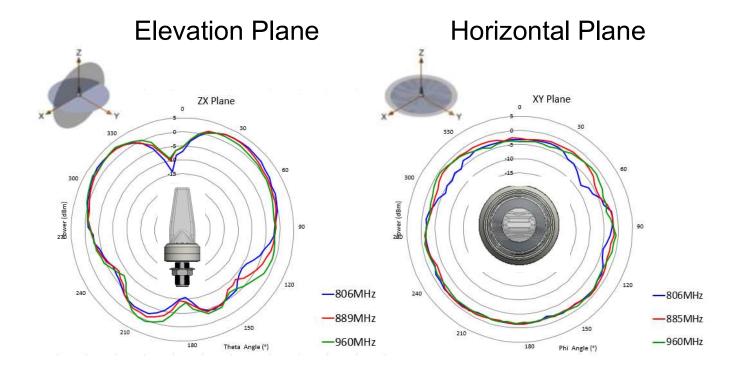
PART NUMBER: ICEFINXXX

Series: IceFin

## **CHARTS**

# Free Space Radiation Pattern

### ICEFIN806DMN





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

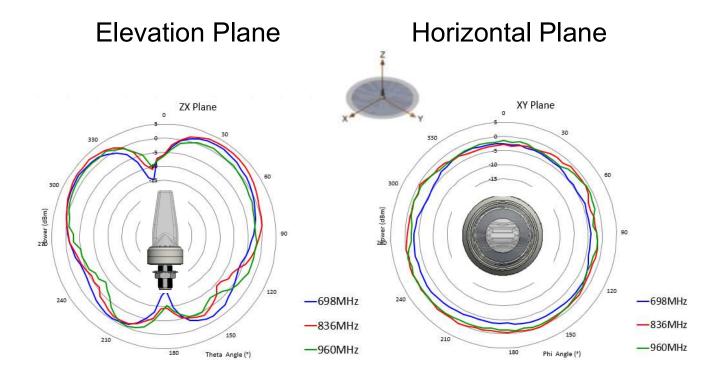
PART NUMBER: ICEFINXXX

Series: IceFin

# **CHARTS**

# Free Space Radiation Pattern

# **ICEFINLDMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

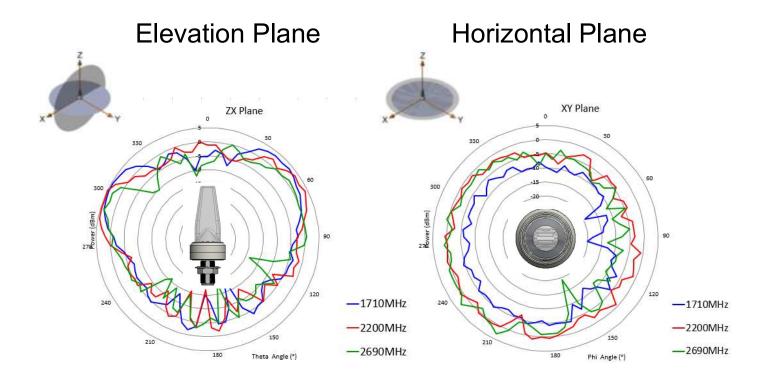
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

# Free Space Radiation Pattern

## **ICEFINLDMN**









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

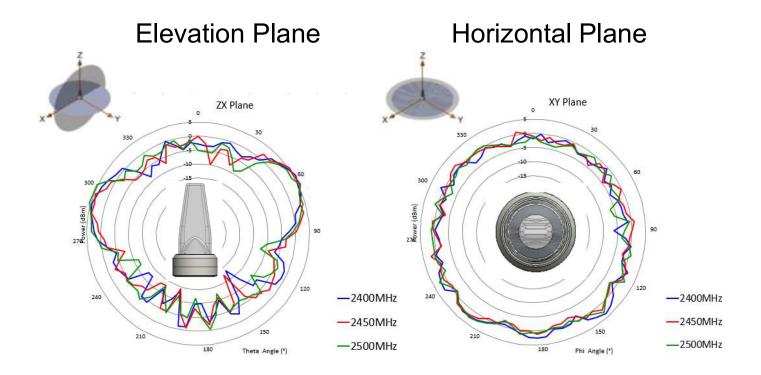
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFIN24NMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

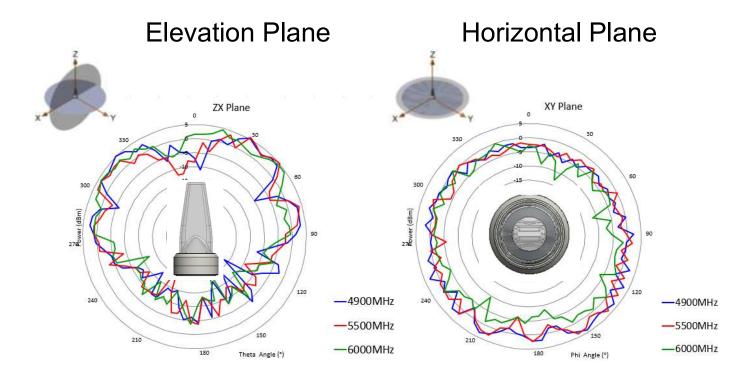
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFIN49NMOHF**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

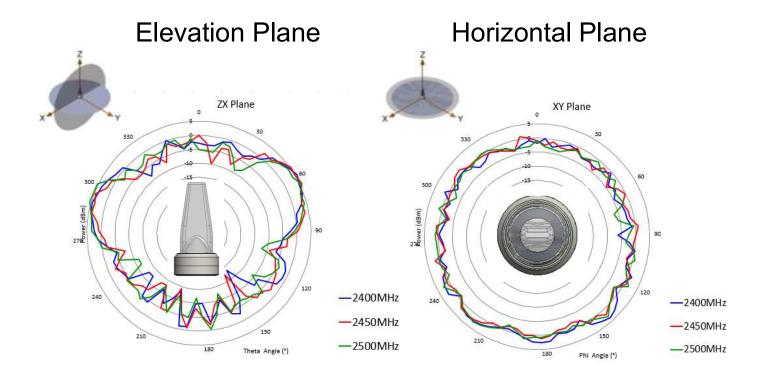
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWNMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

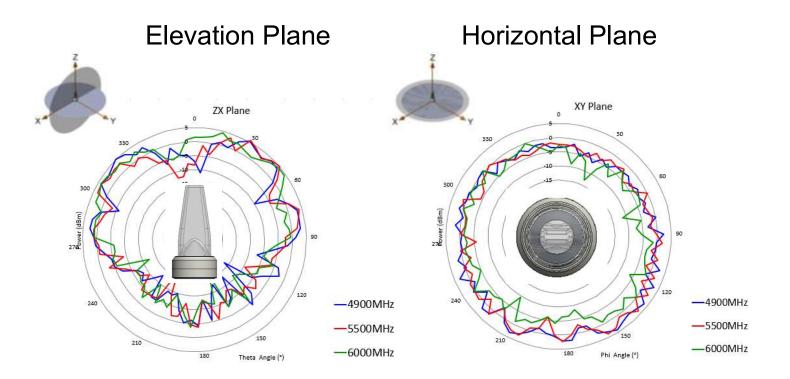
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWNMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

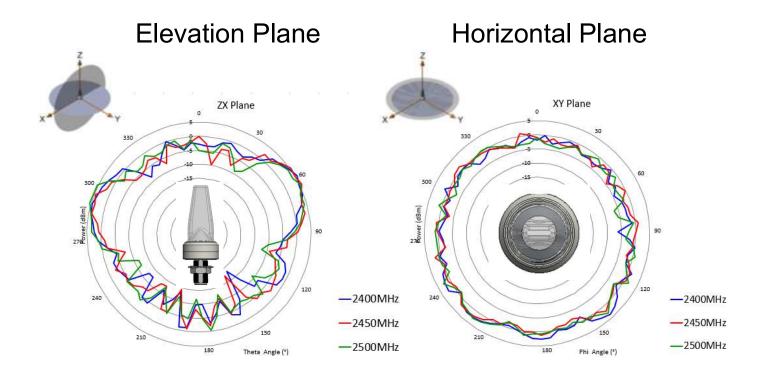
PART NUMBER: ICEFINXXX

Series: IceFin

## **CHARTS**

# Free Space Radiation Pattern

### **ICEFIN24DMN**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

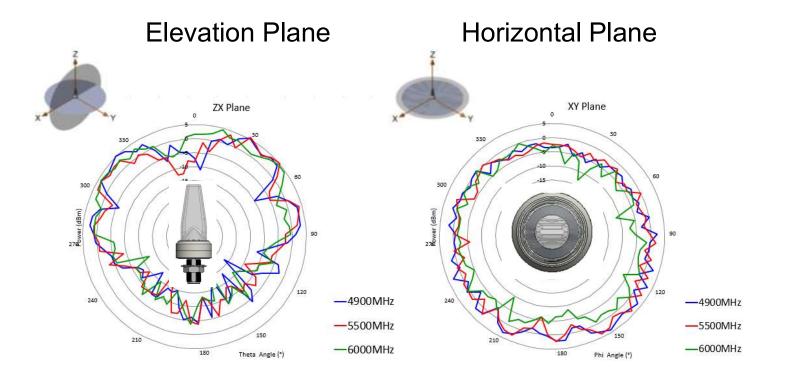
PART NUMBER: ICEFINXXX

Series: IceFin

## **CHARTS**

# Free Space Radiation Pattern

### **ICEFIN49DMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

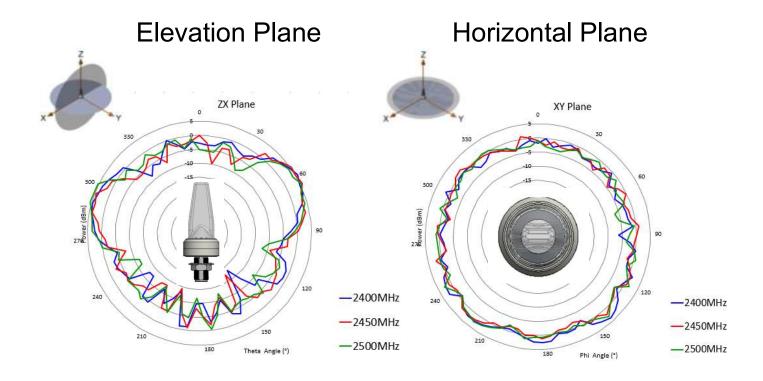
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWDMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

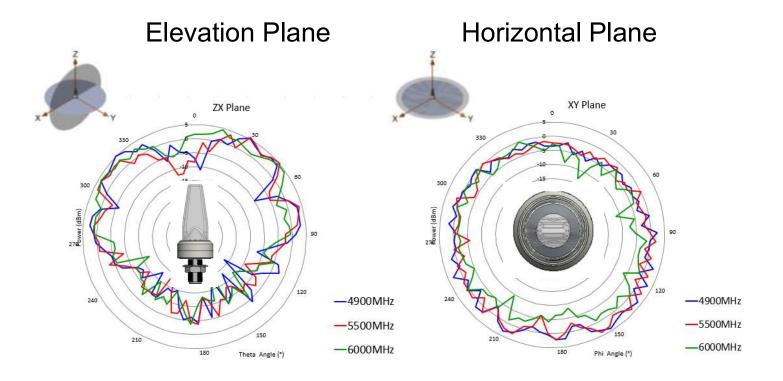
PART NUMBER: ICEFINXXX

Series: IceFin

# **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWDMN**





Series: IceFin

### **TECHNICAL DATA SHEET**

Description: LOW PROFILE MULTIBAND

**ANTENNA** 

**PART NUMBER: ICEFINXXX** 

# **PACKAGING**

Project	Color	Frequency	Size	Fixing System Connector	Packaging
ICEFINLNMOHF	Clarity	698-960MHz 1710-2700MHz	[38] Ø1.496	NMOHF NMO + HF Connector	16 mag / Trace
ICEFIN698/960NMO	Clarity	750-960MHz			16 pcs / Tray 32 pcs / Carton
ICEFIN806NMO	Clarity	806-960MHz			
ICEFIN698/869DMN	Clarity	698-869MHz	[78,71] 3,10 [27,30] 1,07 [38] Ø1,496	DMN Direct Mount + N Female Connector (Screw 5/18-24 UNEF 2A)	96 pcs / Carton
ICEFIN806DMN	Clarity	806-960MHz			
ICEFINLDMN	Clarity	698-960MHz 1710-2700MHz			





**Series: IceFin** 

#### **TECHNICAL DATA SHEET**

Description: LOW PROFILE MULTIBAND

**ANTENNA** 

PART NUMBER: ICEFINXXX

# PACKAGING

PACKAGING							
Project	Color	Frequency	Size	Fixing System Connector	Packaging		
ICEFIN24NMOHF	Clarity	2400-2500MHz					
ICEFIN49NMOHF	Clarity	4900-6000MHz	[66.66]		16 pcs / Tray 32 pcs / Carton		
ICEFINWNMOHF	Clarity	2400-2500MHz 4900-6000MHz	[38] Ø1.496	NMOHF NMO + HF Connector			
ICEFIN24DMN	Clarity	2400-2500MHz	[66 66]		96 pcs / Carton		
ICEFIN49DMN	Clarity	4900-6000MHz			16 pcs / Tray 32 pcs / Carton		
ICEFINWDMN	Clarity	2400-2500MHz 4900-6000MHz	[27.30] 1.07 1.07 [38] Ø1.496	Direct Mount N Female Connector (Screw 5/18-24 UNEF 2A)	96 pcs / Carton		





OOO «ЛайфЭлектроникс" "LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 P/C 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

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