

Description: LOW PROFILE MULTIBAND

**ANTENNA** 

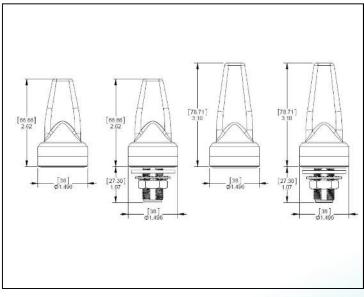
PART NUMBER: ICEFINXXX

**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. CONFIDENTIAL AND PROPRIETARY INFORMATION

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For more 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	[78.71] 3.10 [27.30] 1.07 [38] Ø1.496	DMN		
ICEFIN806DMN	Clarity	806-960MHz				
ICEFINLDMN ue: 1743	Clarity	698-960MHz 1710-2700MHz		Direct Mount + N Female Connector (Screw 5/18-24 UNEF 2A)		





Description: LOW PROFILE MULTIBAND

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PART NUMBER: ICEFINXXX

Series: IceFin

# 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		Direct Mount N Female Connector (Screw 5/18-24 UNEF 2A)	
ICEFIN49DMN	Clarity	4900-6000MHz	[66.66]		
ICEFINWDMN	Clarity	2400-2500MHz 4900-6000MHz	[27.30] 1.07 [38] 01.496		

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
		, (2.300DI(U.030-U.30UHZ)) 75%		20W(100%	
					duty cycle)
ICEFINLNMOHF	698-960MHz		2 98dBi(0 698-0 96GHz)	750/	
	1710-2700MHz			20,0	
				01/0	30W(50%
					duty cycle)
					30W(100%
		2.2:1	4.5dBi		duty cycle)
				65%	
ICEFIN698/960NMO	750-960MHz			33,1	40W(50%
					duty cycle)
	806-960MHz	2.2:1	2.91dBi		30W(100%
					duty cycle)
ICEFIN806NMO					
				63%	40W(50%
					duty cycle)
	698-869MHz	2.3:1			5W(100%
_					duty cycle)
ICEFIN698/869DMN			2.6dBi	54%	_
			2.0001	34/0	15W(50%
					duty cycle)
	806-960MHz	2.2:1	3.7dBi		10W(100%
ICEFIN806DMN				78%	duty cycle)
				78%	2014/500/
					20W(50%
					duty cycle) 20W(100%
ICEFINLDMN	698-960MHz 1710-2700MHz	3.2:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)			duty cycle)
					duty tytie)
			3.1dBi(0.698-0.96GHz)	76%	
			5.17dBi(1.71-2.69GHz)	79%	
			,		30W(50%
					duty cycle)

Issue: 1743

ROHS



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) 30W(50% duty cycle)
ICEFIN49NMOHF	4900-6000MHz	2:1	6.2dBi	66%	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) 30W(50% duty cycle)
ICEFIN24DMN	2400-2500MHz	2:1	5.2dBi	88%	20W(100% duty cycle) 30W(50% duty cycle)
ICEFIN49DMN	4900-6000MHz	2:1	6.2dBi	66%	20W(100% duty cycle) 30W(50% duty cycle)
ICEFINWDMN	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) 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



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### **CHARTS**

# **VSWR**

# ICEFINLNMOHF VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

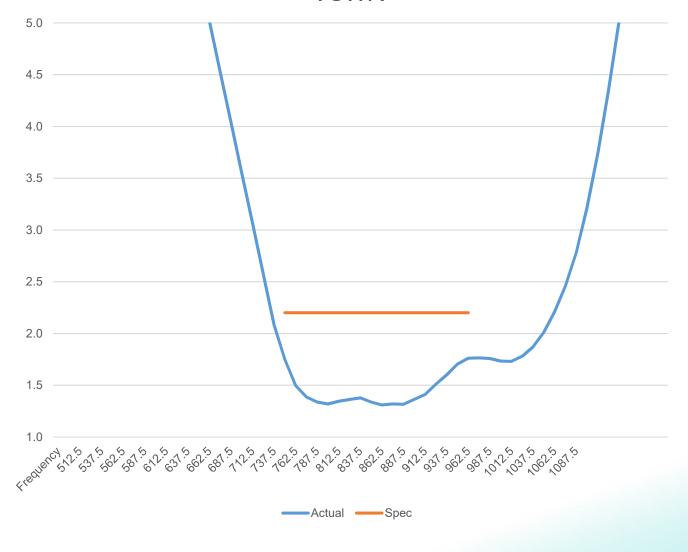
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN698/960NMO VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

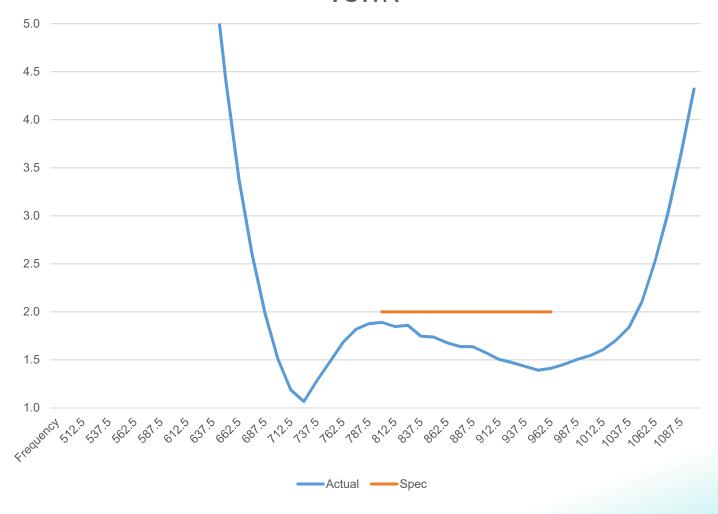
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN806NMO VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

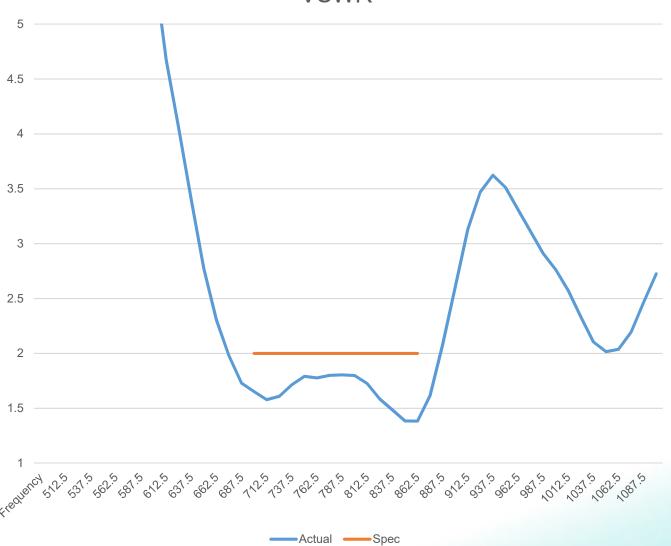
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN698/869DMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

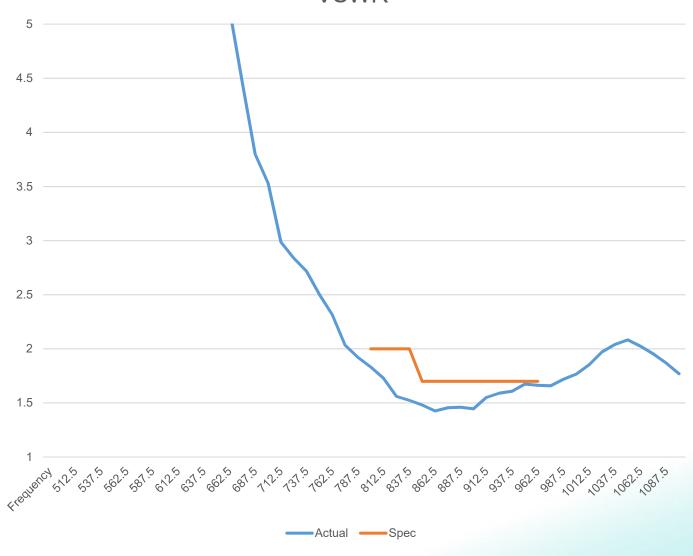
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN806DMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

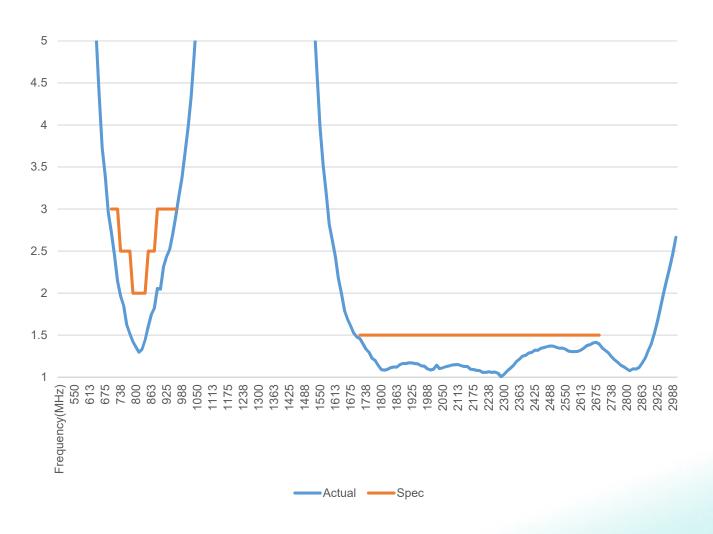
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINLDMN VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

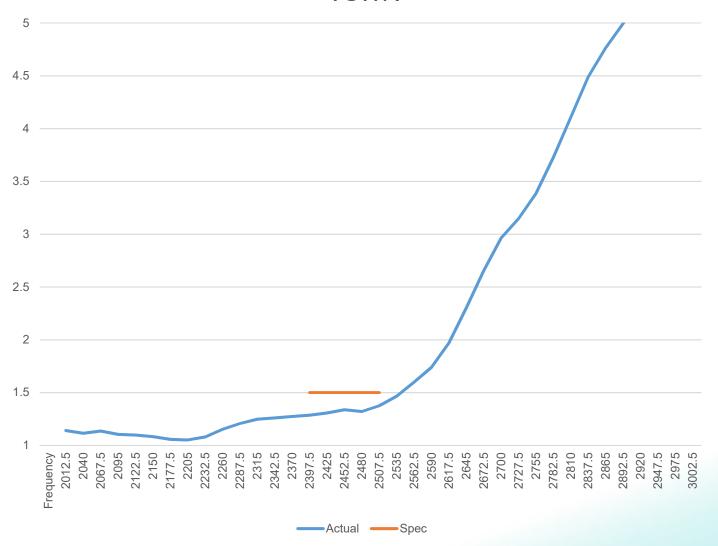
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFIN24NMOHF VSWR









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

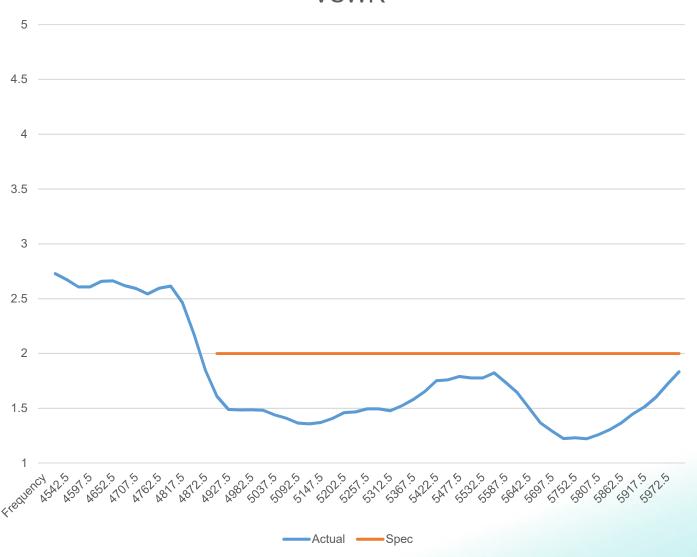
PART NUMBER: ICEFINXXX

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** 

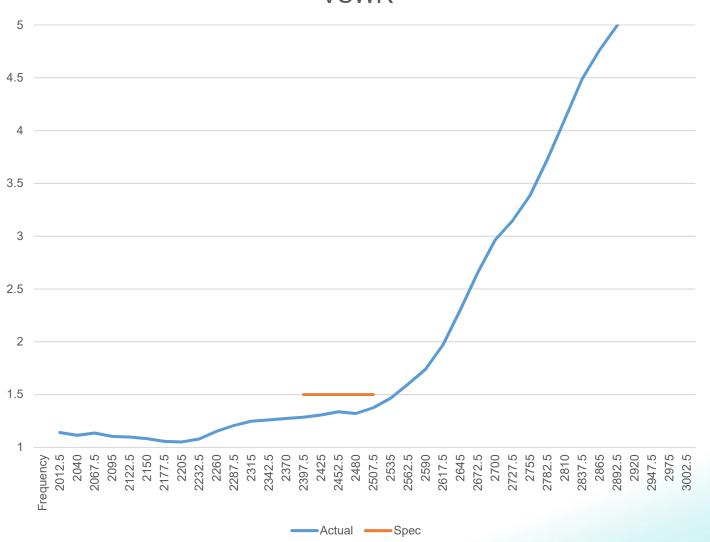
**PART NUMBER: ICEFINXXX** 

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** 

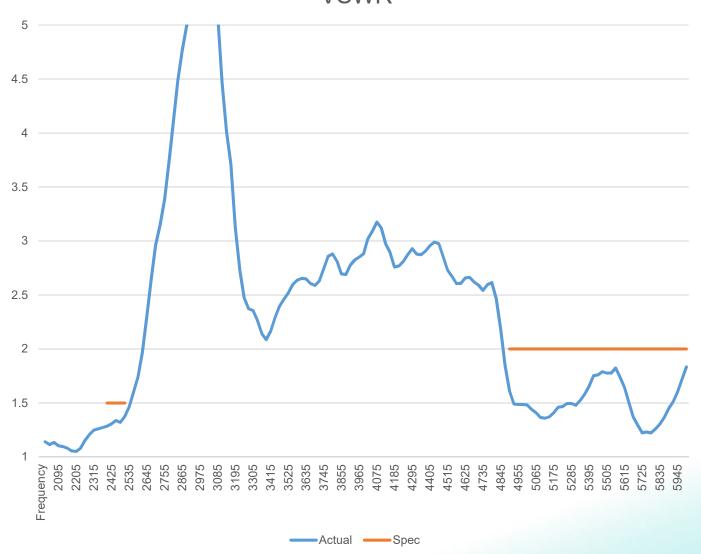
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# **VSWR**

# ICEFINWDMN VSWR







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

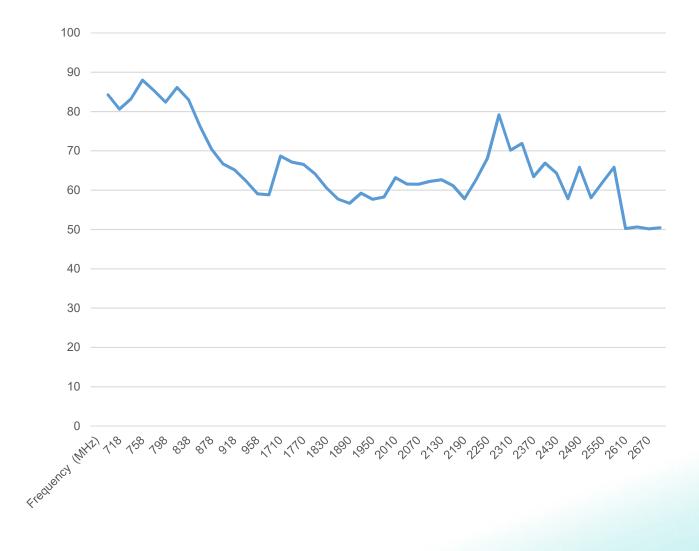
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINLNMOHF Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

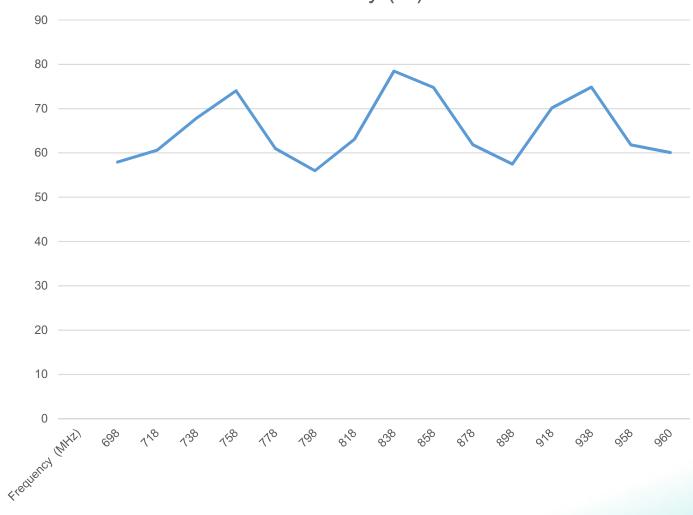
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN698/960NMO Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

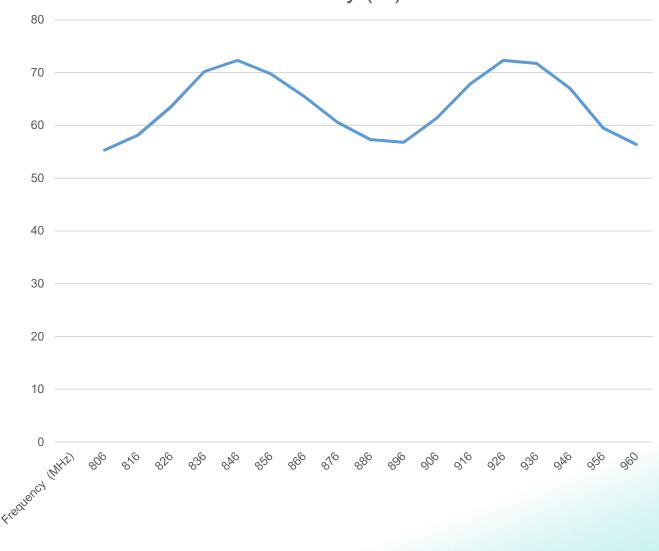
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN806NMO Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

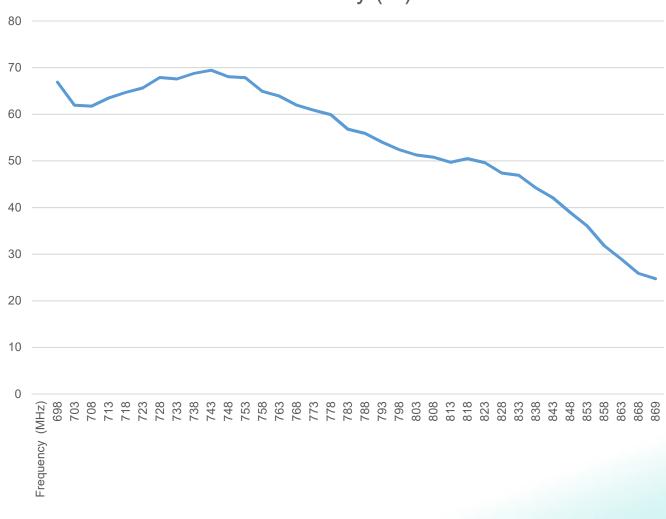
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN698/869DMN Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

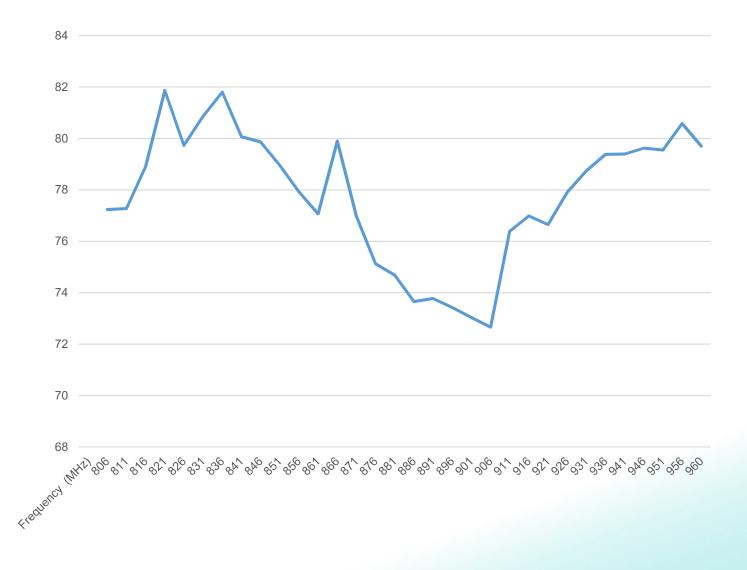
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN806DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

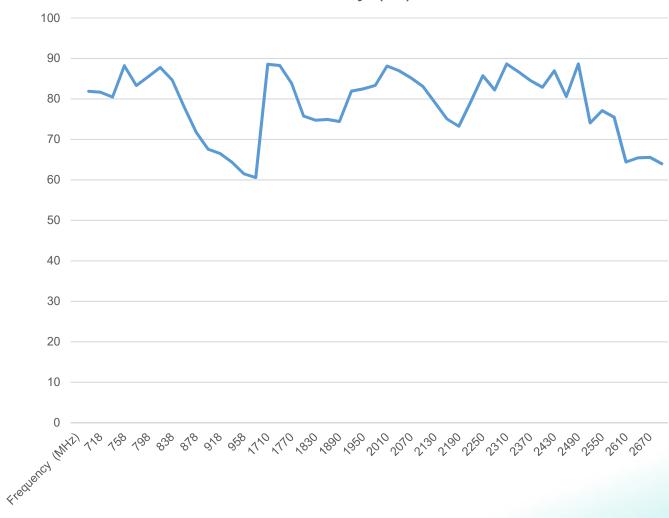
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINLDMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

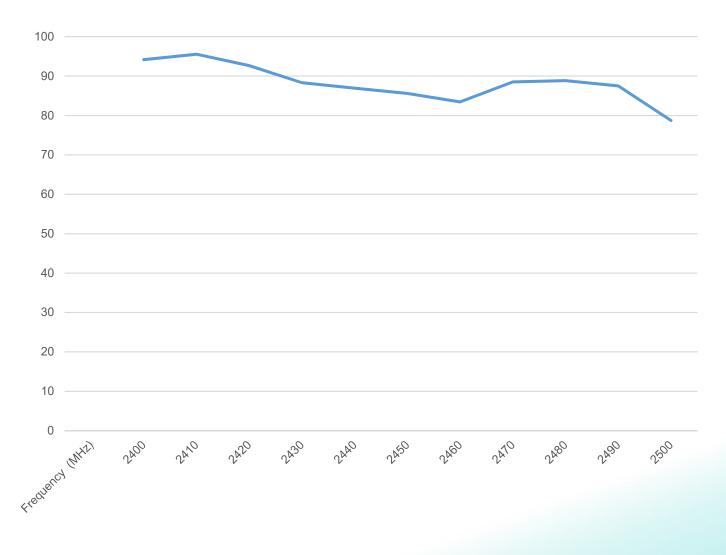
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN24NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

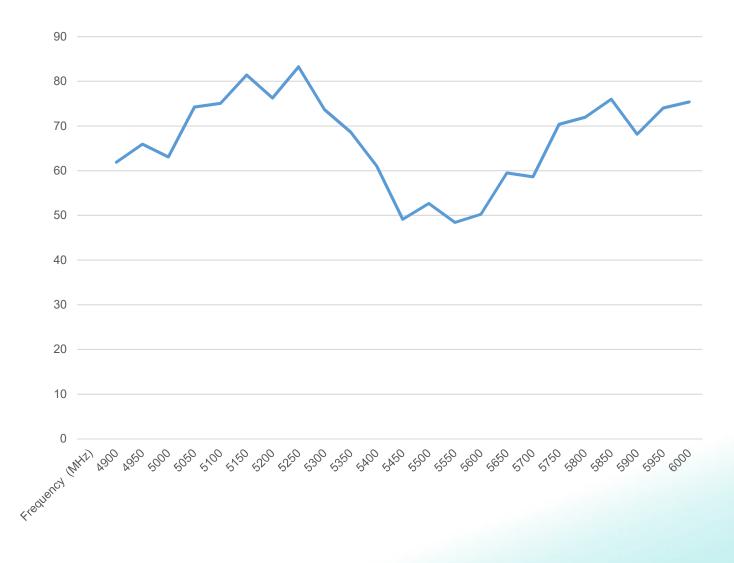
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN49NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

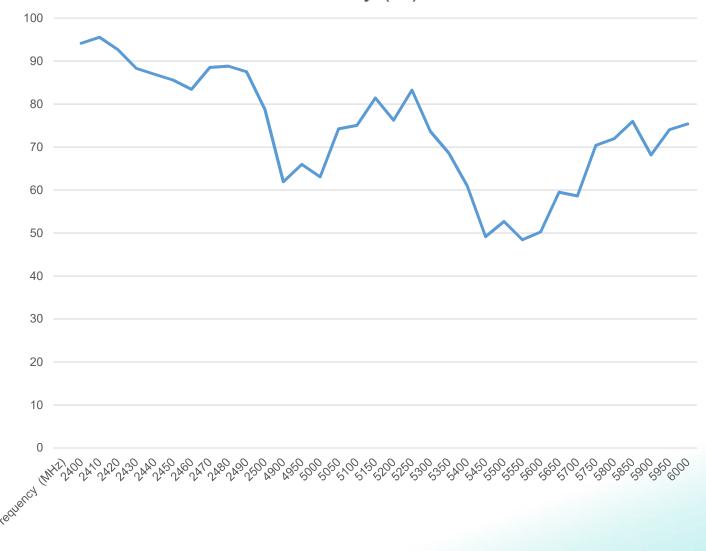
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINWNMOHF Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

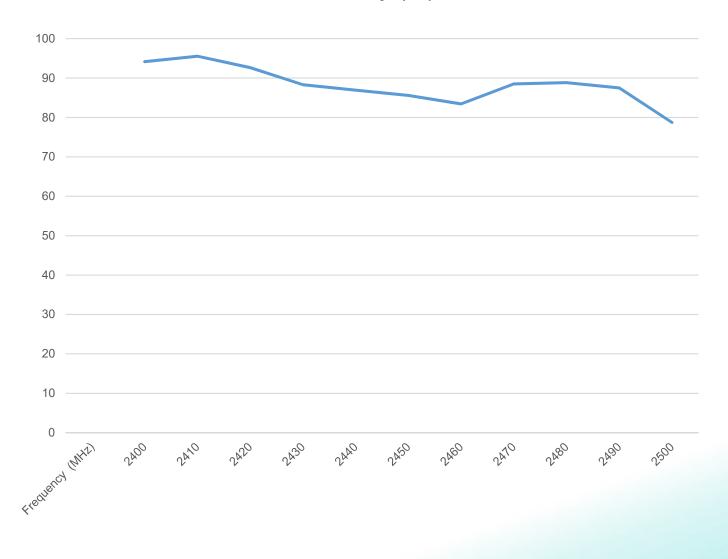
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFIN24DMN Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

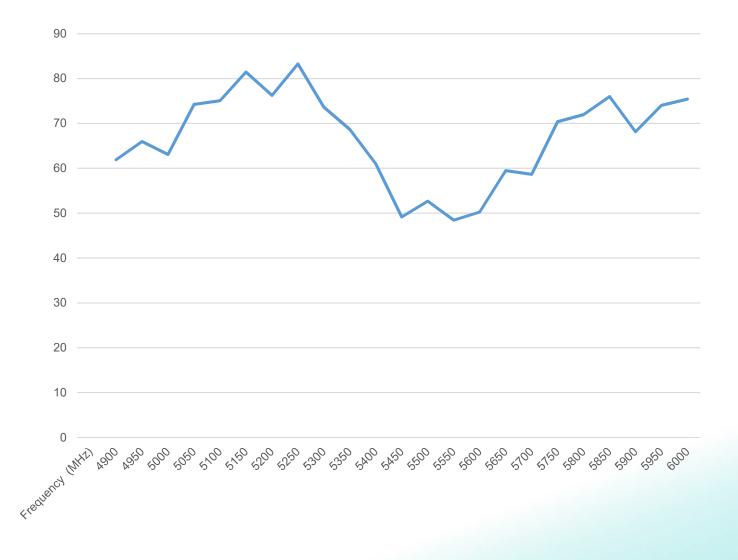
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

ICEFIN49DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

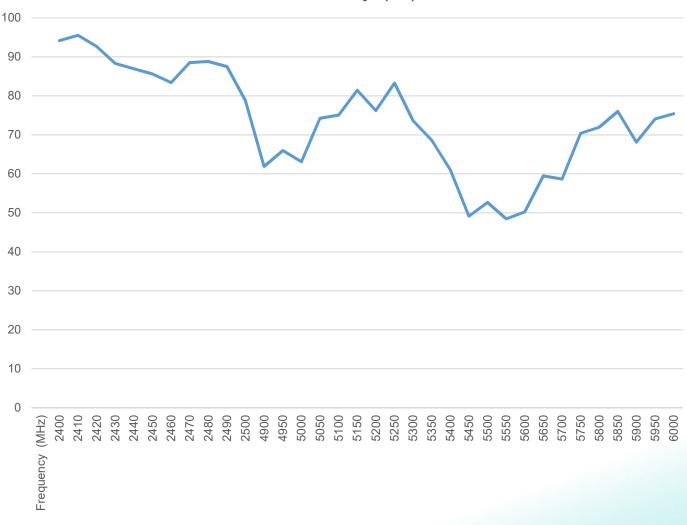
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Efficiency(%)

# ICEFINWDMN Efficiency (%)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

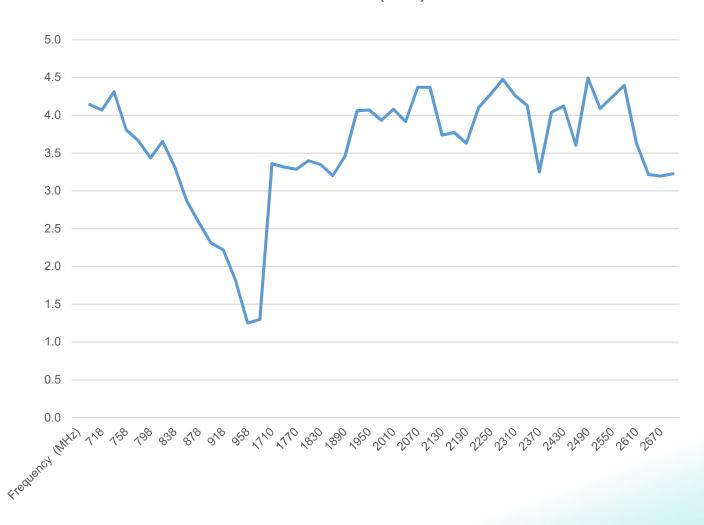
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFINLNMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

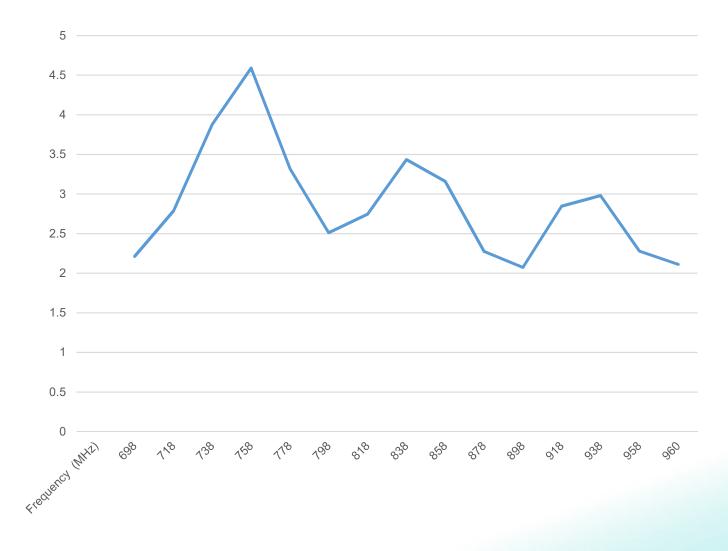
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN698/960NMO Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

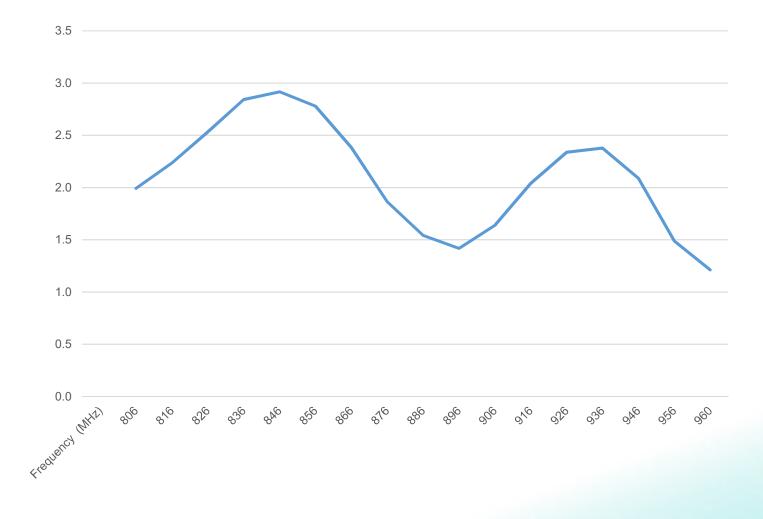
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFIN806NMO Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

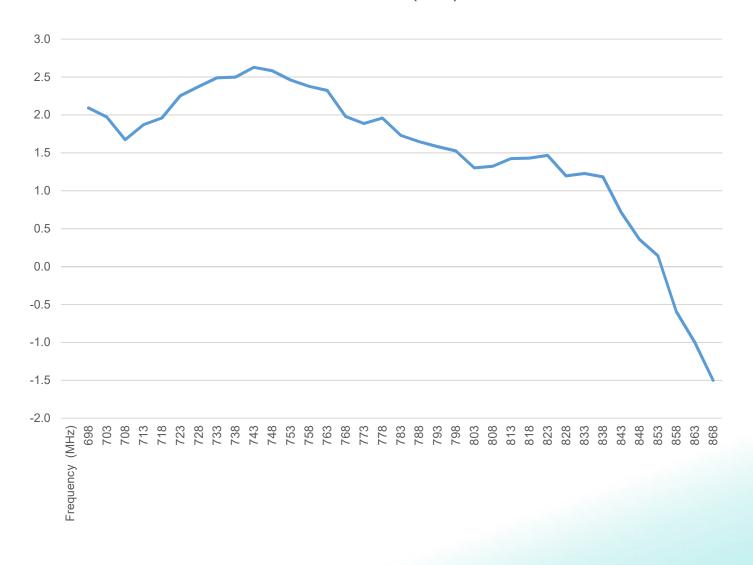
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN698/869DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

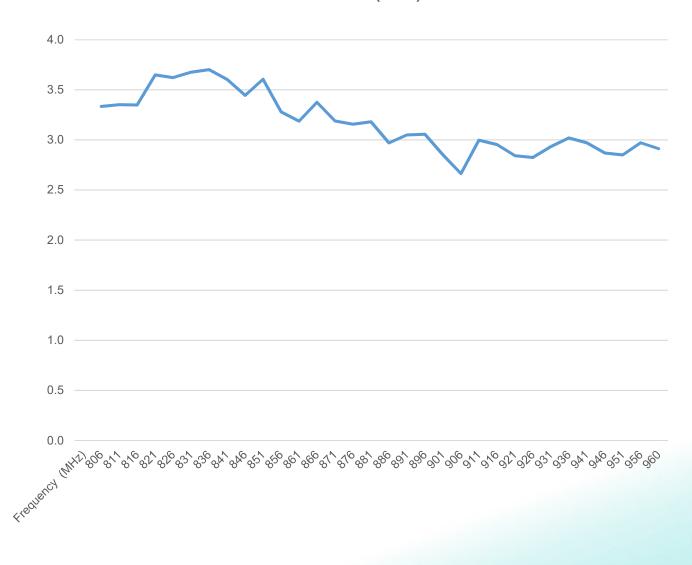
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN806DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

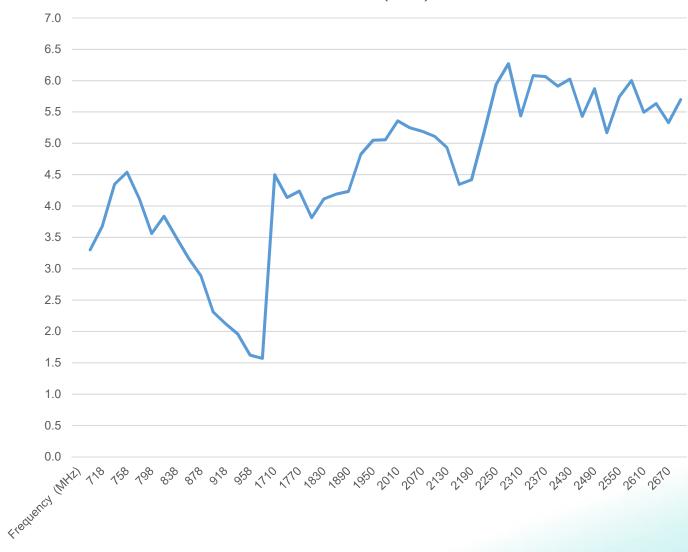
PART NUMBER: ICEFINXXX

Series: IceFin

#### **CHARTS**

Peak Gain (dBi)

# ICEFINLDMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

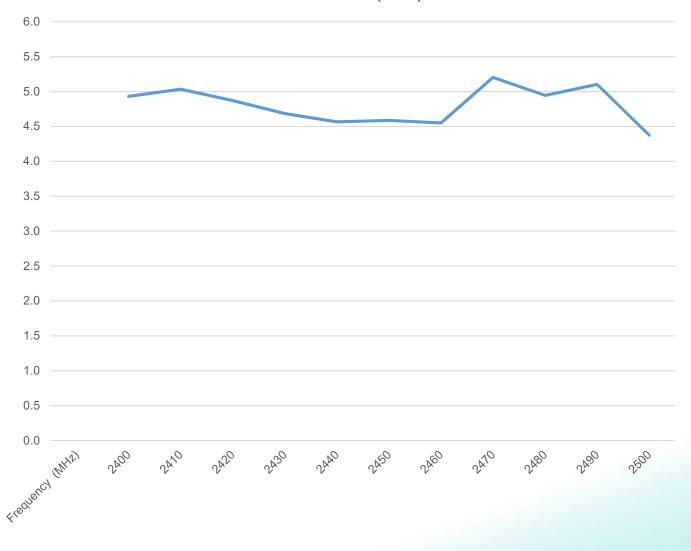
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

# ICEFIN24NMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

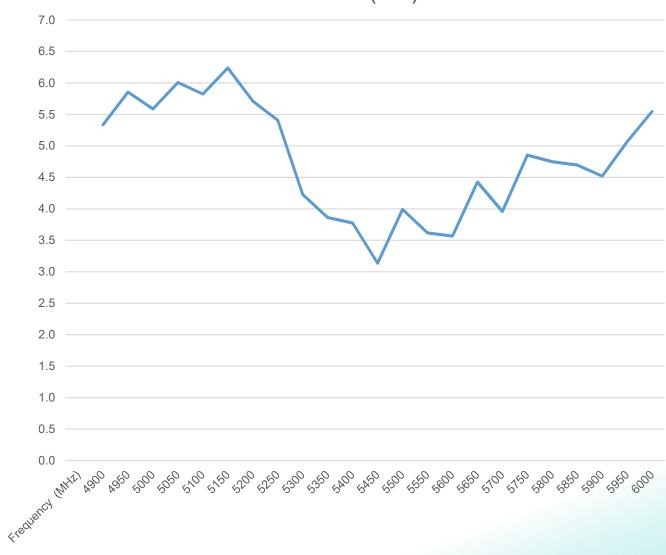
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

Peak Gain (dBi)

# ICEFIN49NMOHF Peak Gain(dBi)



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Description: LOW PROFILE MULTIBAND

**ANTENNA** 

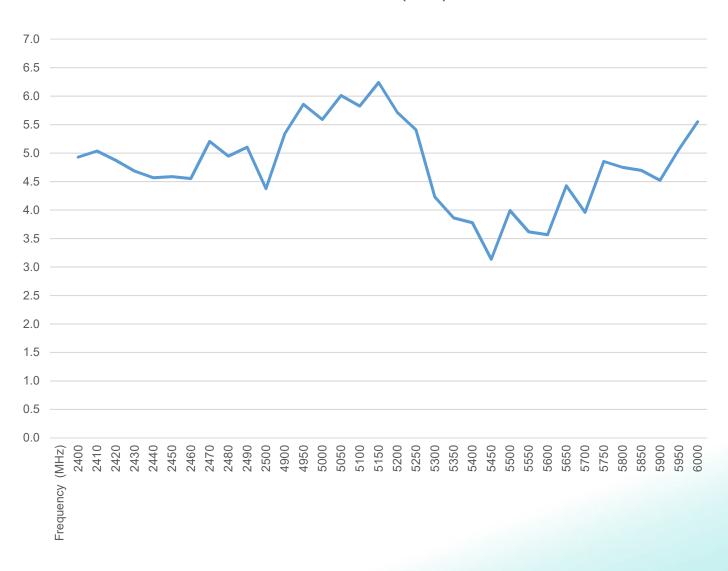
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

Peak Gain (dBi)

# ICEFINWNMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

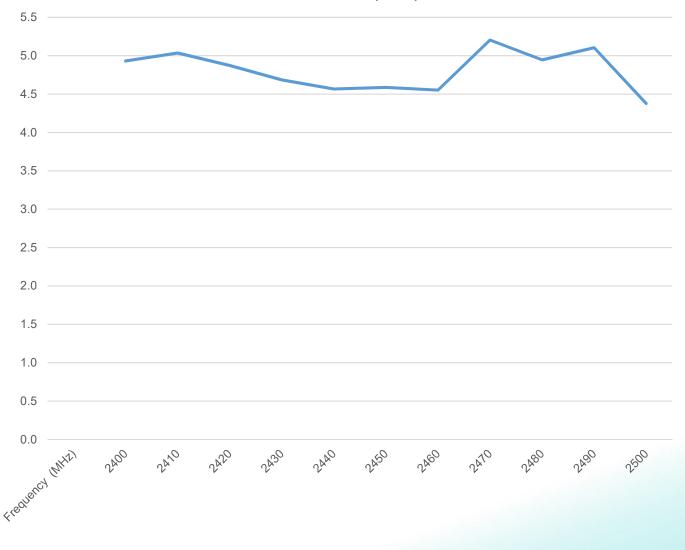
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

Peak Gain (dBi)

## ICEFIN24DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

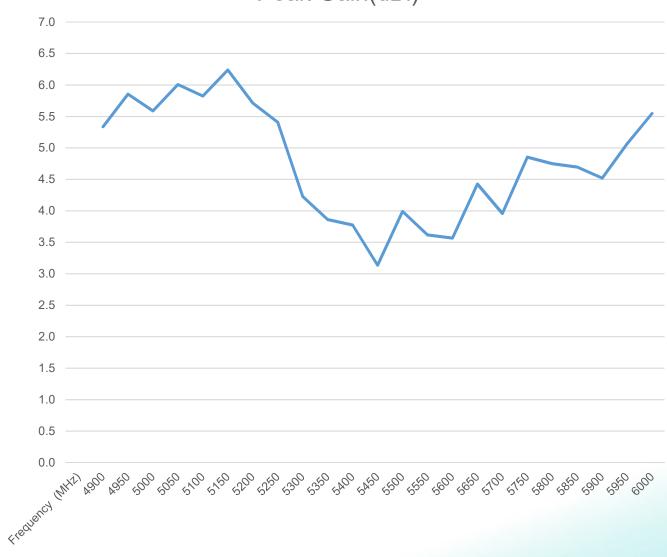
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFIN49DMN Peak Gain(dBi)



Issue: 1743





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

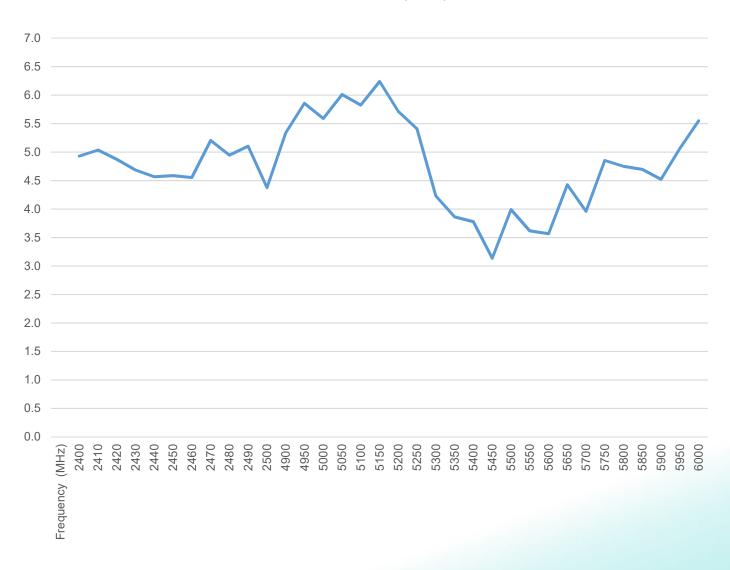
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

Peak Gain (dBi)

ICEFINWDMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

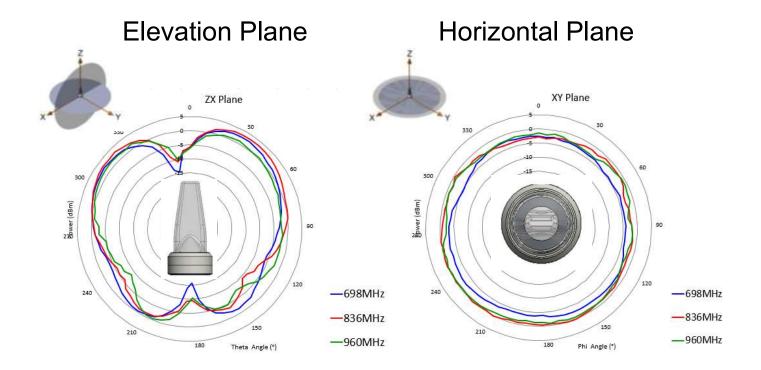
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINLNMOHF**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

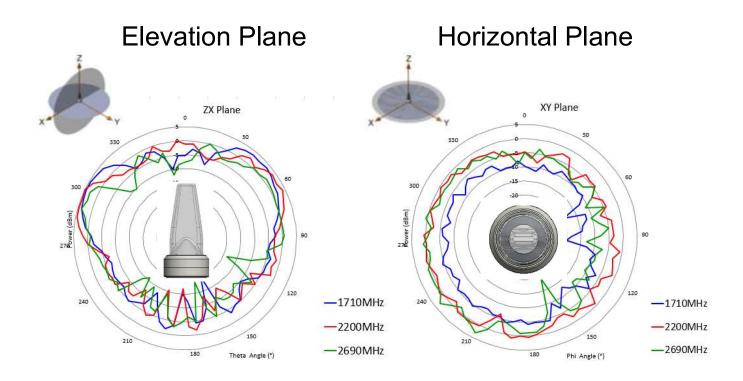
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINLNMOHF**









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

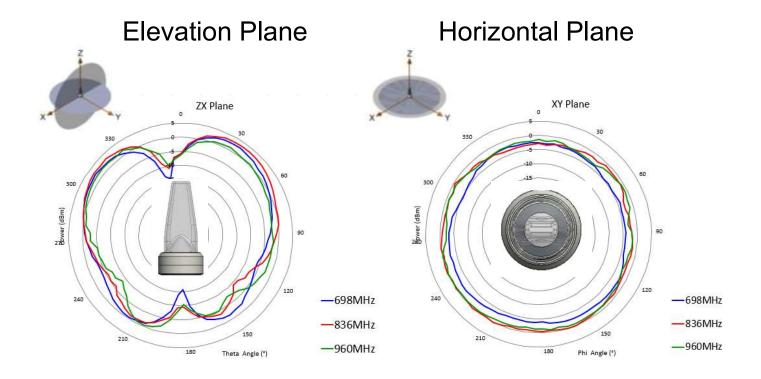
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### ICEFIN698/960NMO









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

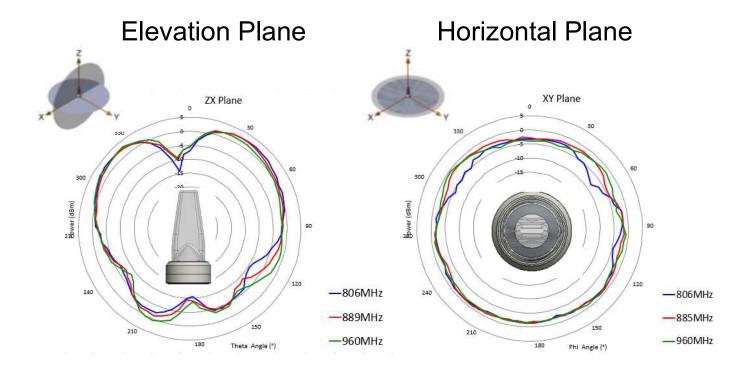
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### ICEFIN806NMO









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

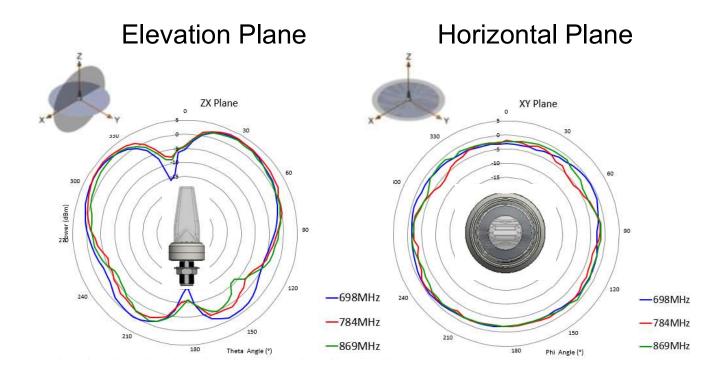
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### ICEFIN698/869DMN







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

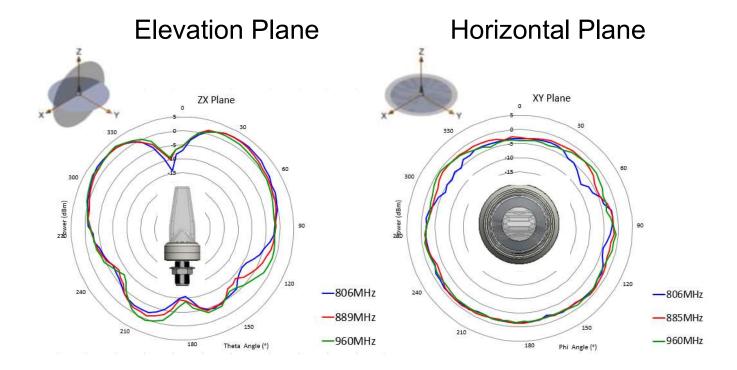
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### ICEFIN806DMN





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

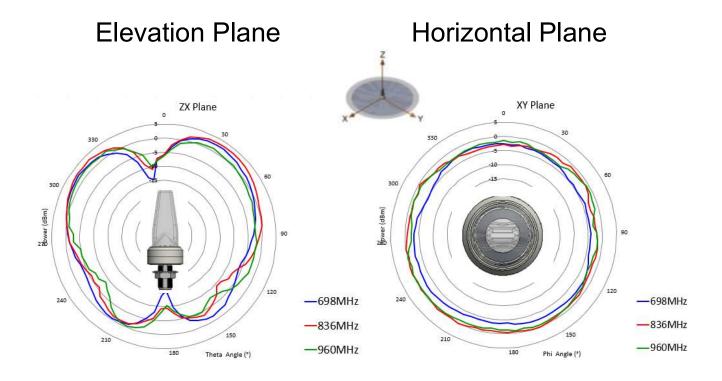
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINLDMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

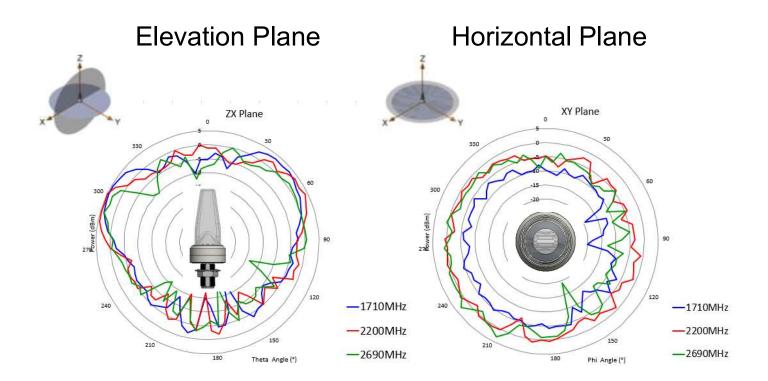
PART NUMBER: ICEFINXXX

**Series: IceFin** 

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINLDMN**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

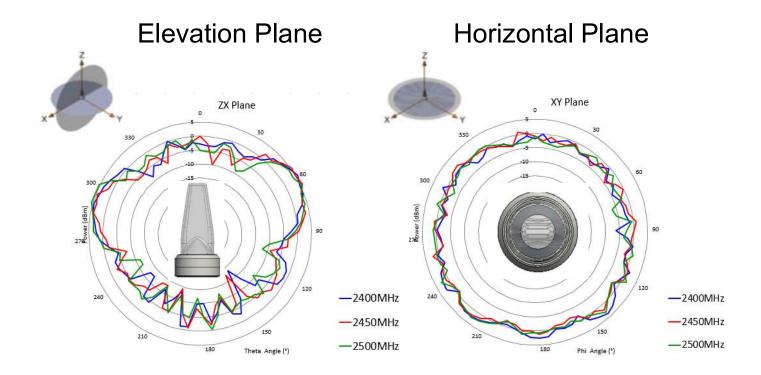
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFIN24NMOHF**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

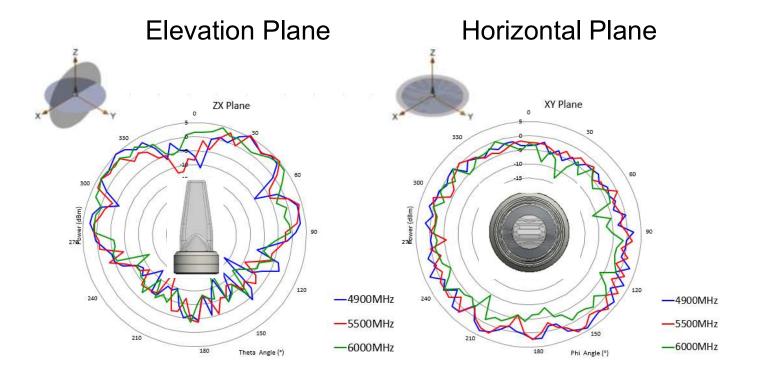
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFIN49NMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

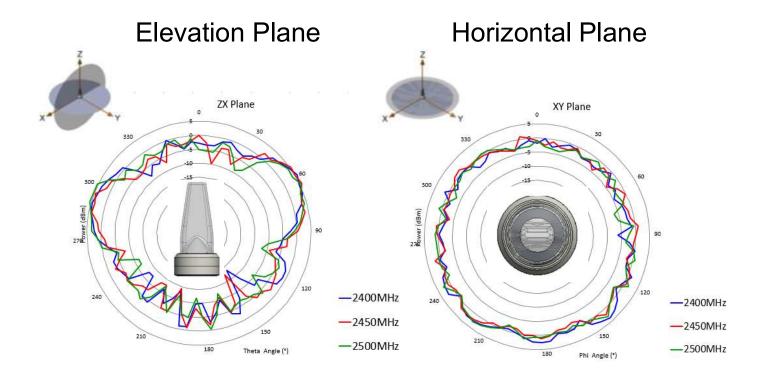
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWNMOHF**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

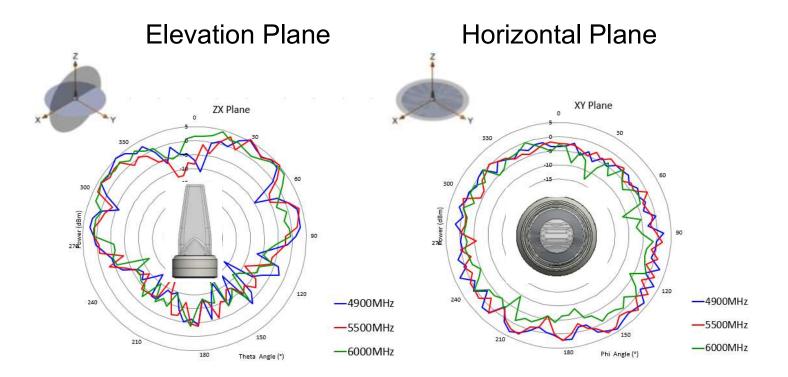
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINWNMOHF**









Description: LOW PROFILE MULTIBAND

**ANTENNA** 

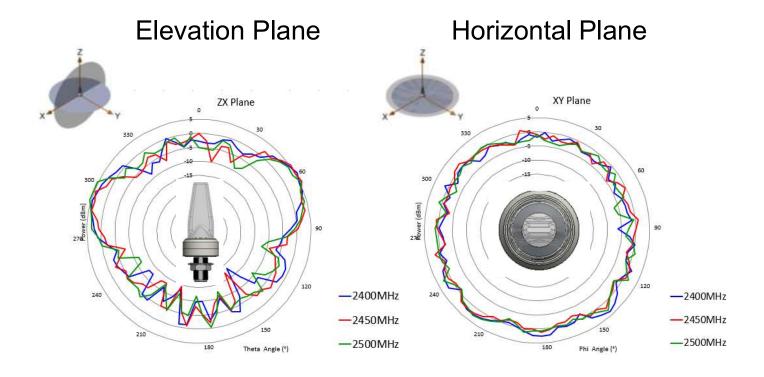
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFIN24DMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

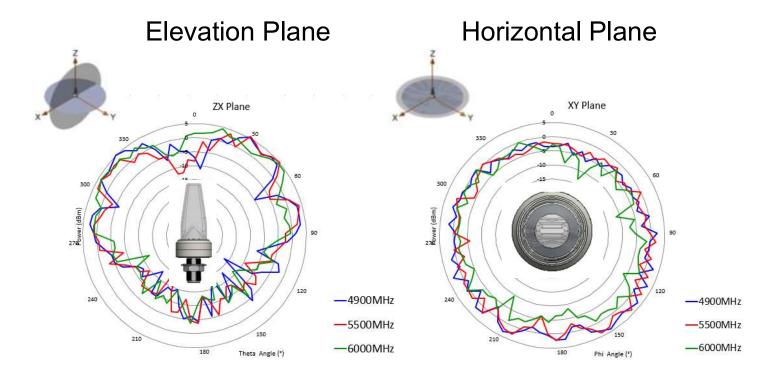
**PART NUMBER: ICEFINXXX** 

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFIN49DMN**







Description: LOW PROFILE MULTIBAND

**ANTENNA** 

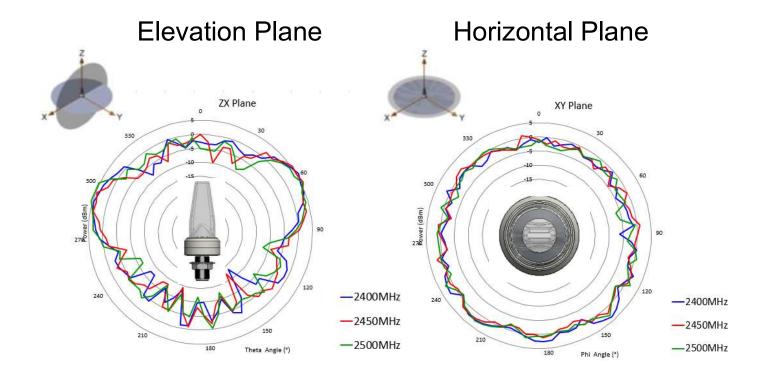
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

# Free Space Radiation Pattern

### **ICEFINWDMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

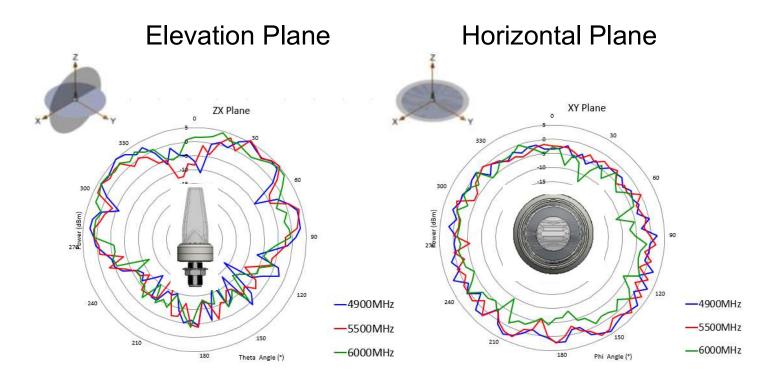
PART NUMBER: ICEFINXXX

Series: IceFin

### **CHARTS**

### Free Space Radiation Pattern

### **ICEFINWDMN**





Description: LOW PROFILE MULTIBAND

**ANTENNA** 

**PART NUMBER: ICEFINXXX** 

# Series: IceFin

### **PACKAGING**

Project	Color	Frequency	Size	Fixing System Connector	Packaging
ICEFINLNMOHF	Clarity	698-960MHz 1710-2700MHz	78.71] 3.10 [38] Ø1.496	NMOHF NMO + HF Connector	
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			

Issue: 1743





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	[66.66] 2.62 [38] Ø1.496	NMOHF NMO + HF Connector	16 pcs / Tray 32 pcs / Carton		
ICEFIN49NMOHF	Clarity	4900-6000MHz					
ICEFINWNMOHF	Clarity	2400-2500MHz 4900-6000MHz					
ICEFIN24DMN	Clarity	2400-2500MHz	[27.30] 1.07 [38] Ø1.496		96 pcs / Carton		
ICEFIN49DMN	Clarity	4900-6000MHz			16 pcs / Tray 32 pcs / Carton		
ICEFINWDMN	Clarity	2400-2500MHz 4900-6000MHz		Direct Mount N Female Connector (Screw 5/18-24 UNEF 2A)	96 pcs / Carton		

Issue: 1743

