

Description: LOW PROFILE MULTIBAND

ANTENNA

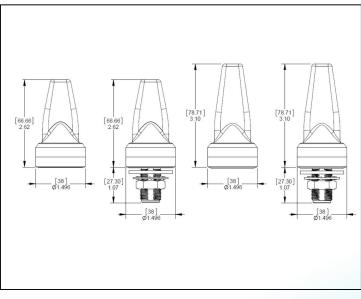
PART NUMBER: ICEFINXXX

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

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PART NUMBER: ICEFINXXX

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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		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] $\phi_{1.496}$		

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
ICEFINLNMOHF	698-960MHz 1710-2700MHz	3.2:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)	2.98dBi(0.698-0.96GHz) 3.82dBi(1.71-2.69GHz)	75% 61%	20W(100% duty cycle)
			,	01/0	30W(50% duty cycle)
ICEFIN698/960NMO	750-960MHz	2.2:1	4.5dBi	65%	30W(100% duty cycle) 40W(50% duty cycle)
ICEFIN806NMO	806-960MHz	2.2:1	2.91dBi	63%	30W(100% duty cycle) 40W(50% duty cycle)
ICEFIN698/869DMN	698-869MHz	2.3:1	2.6dBi	54%	5W(100% duty cycle) 15W(50% duty cycle)
ICEFIN806DMN	806-960MHz	2.2:1	3.7dBi	78%	10W(100% duty cycle) 20W(50% duty cycle)
ICEFINLDMN	698-960MHz 1710-2700MHz	3.2:1(0.698-0.96GHz) 2:1(1.71-2.7GHz)	3.1dBi(0.698-0.96GHz) 5.17dBi(1.71-2.69GHz)	76% 79%	20W(100% duty cycle) 30W(50% duty cycle)

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ROHS



Series: IceFin

TECHNICAL DATA SHEET

Description: LOW PROFILE MULTIBAND

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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 50Ω

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







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CHARTS

VSWR

ICEFIN698/960NMO VSWR









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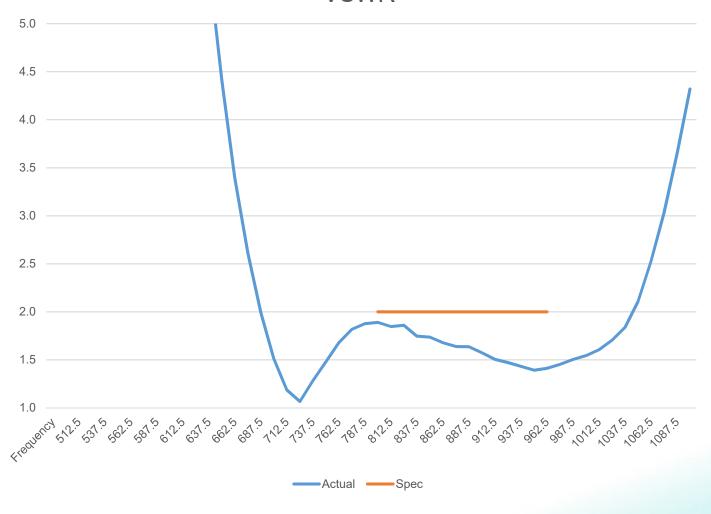
PART NUMBER: ICEFINXXX

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CHARTS

VSWR

ICEFIN806NMO VSWR









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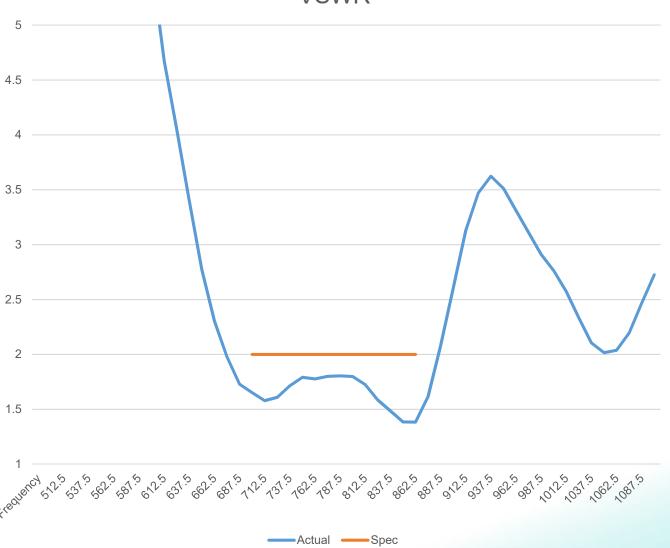
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CHARTS

VSWR

ICEFIN698/869DMN VSWR



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ROHS



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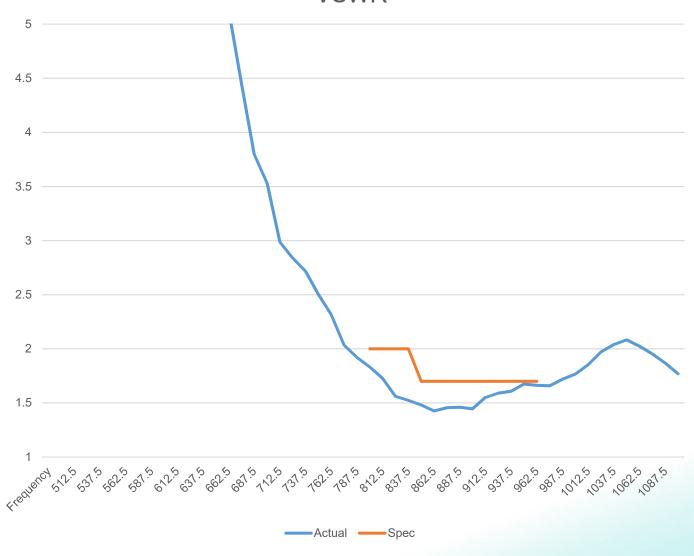
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CHARTS

VSWR

ICEFIN806DMN VSWR







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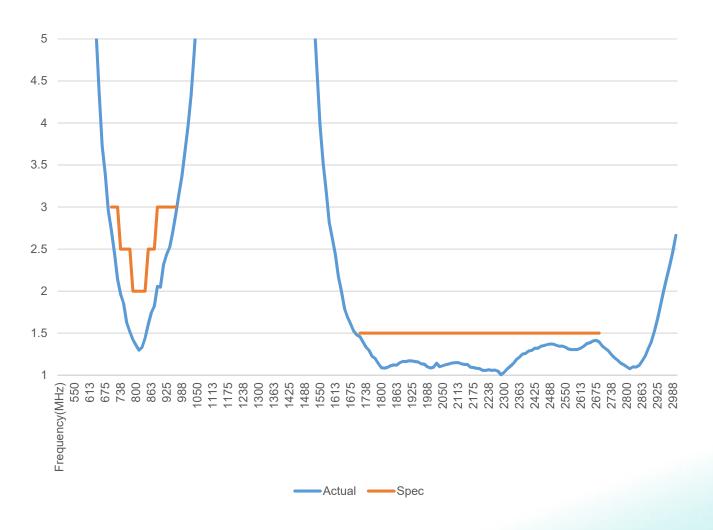
PART NUMBER: ICEFINXXX

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CHARTS

VSWR

ICEFINLDMN VSWR









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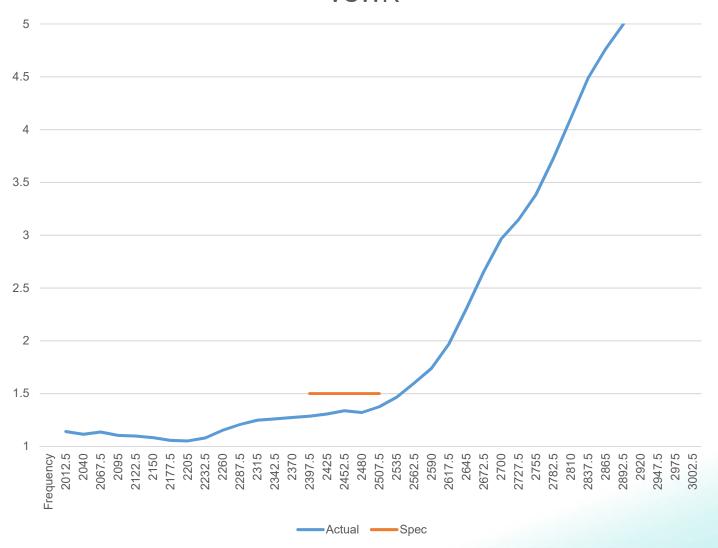
PART NUMBER: ICEFINXXX

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CHARTS

VSWR

ICEFIN24NMOHF VSWR









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CHARTS

VSWR

ICEFIN49NMOHF VSWR







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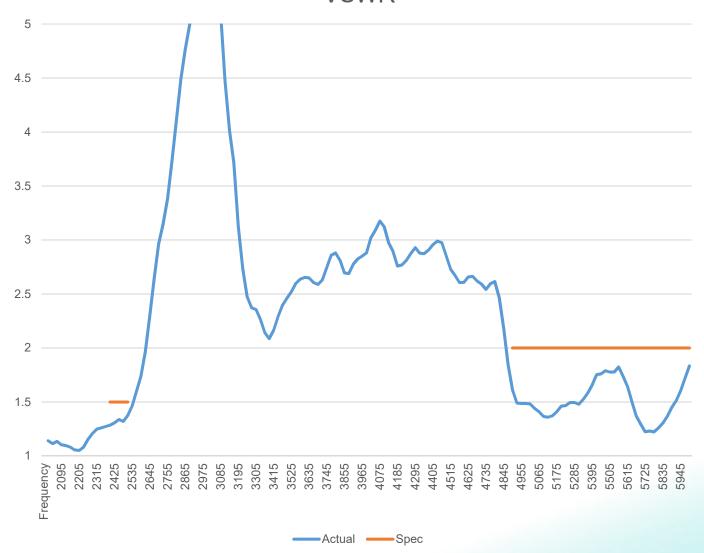
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CHARTS

VSWR

ICEFINWNMOHF VSWR







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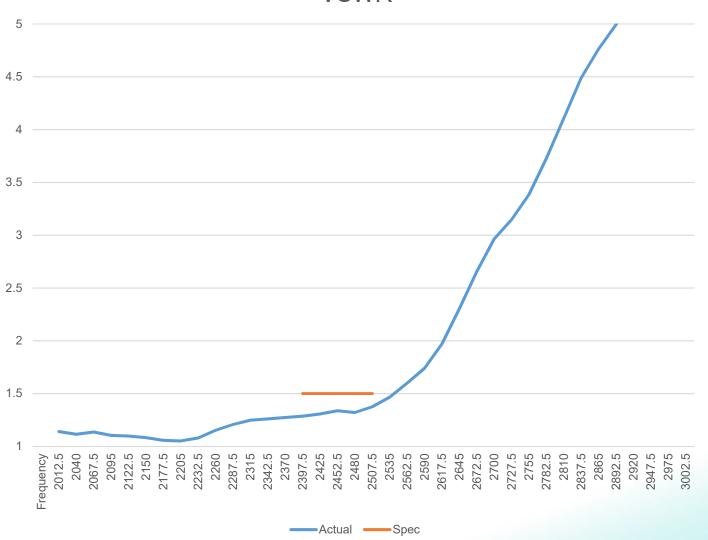
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CHARTS

VSWR

ICEFIN24DMN VSWR







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CHARTS

VSWR

ICEFIN49DMN VSWR







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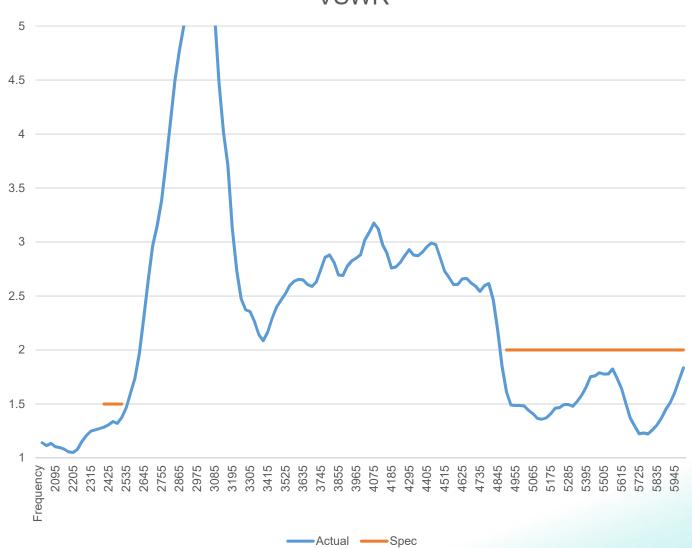
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CHARTS

VSWR

ICEFINWDMN VSWR







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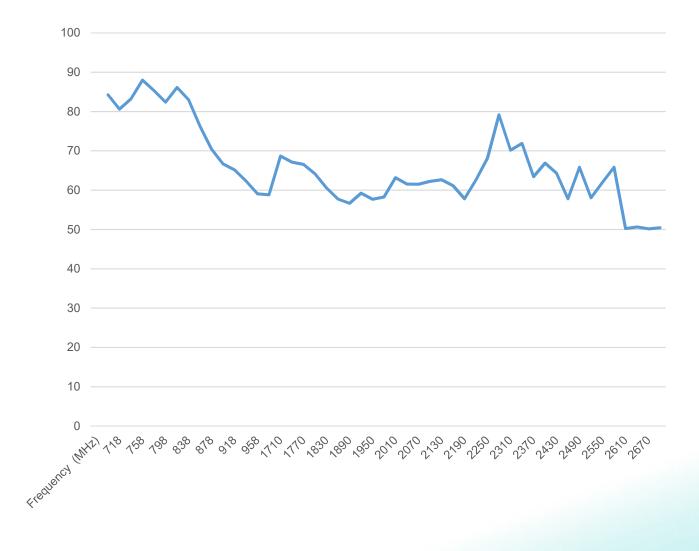
PART NUMBER: ICEFINXXX

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CHARTS

Efficiency(%)

ICEFINLNMOHF Efficiency (%)







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ANTENNA

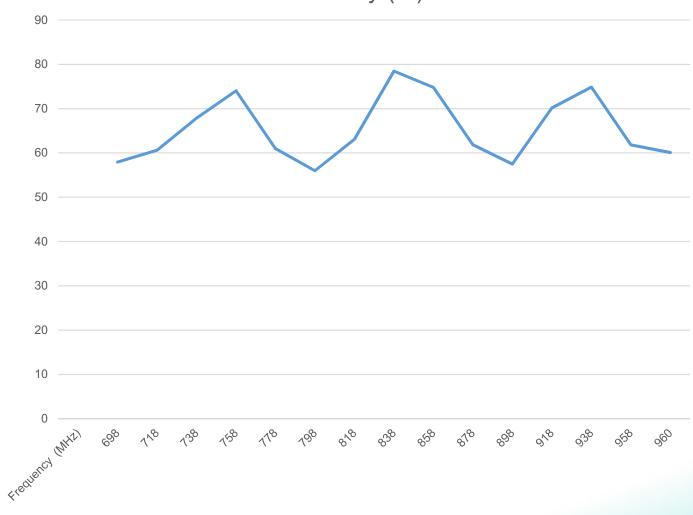
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CHARTS

Efficiency(%)

ICEFIN698/960NMO Efficiency (%)









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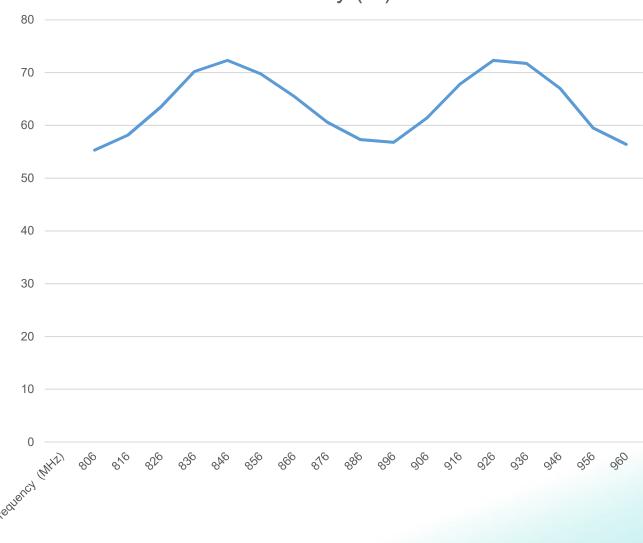
PART NUMBER: ICEFINXXX

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CHARTS

Efficiency(%)

ICEFIN806NMO Efficiency (%)







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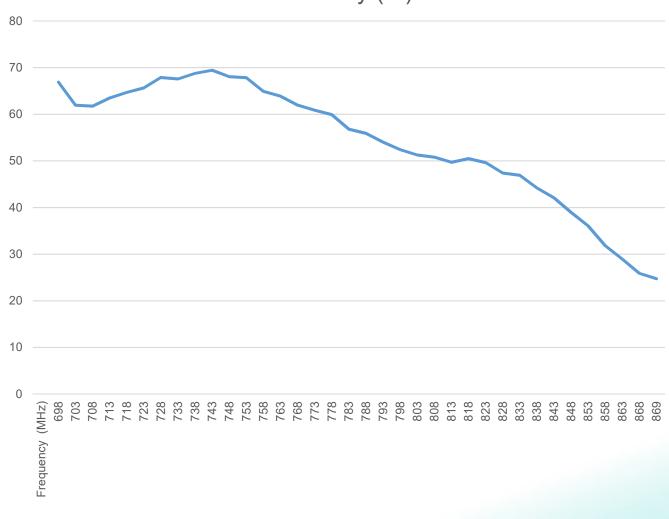
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFIN698/869DMN Efficiency (%)







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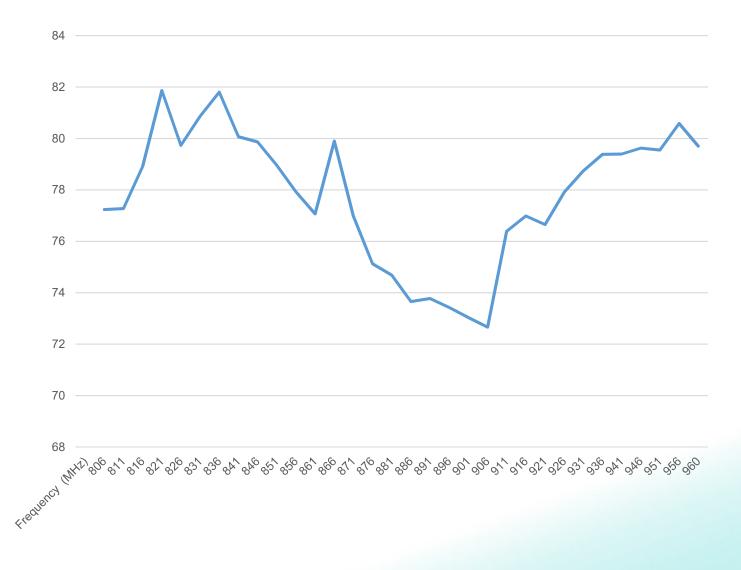
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFIN806DMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

ANTENNA

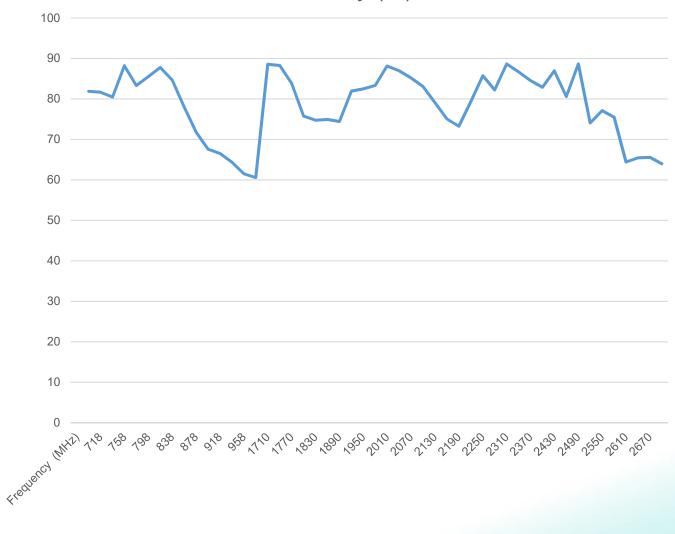
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFINLDMN Efficiency (%)







Description: LOW PROFILE MULTIBAND

ANTENNA

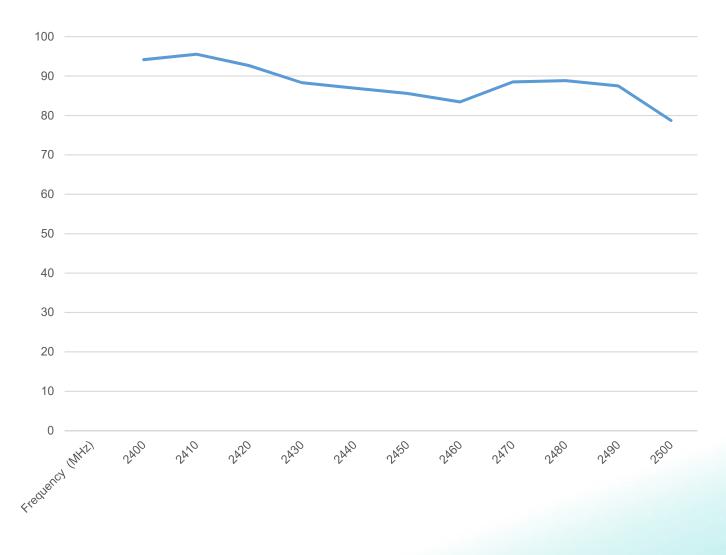
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFIN24NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

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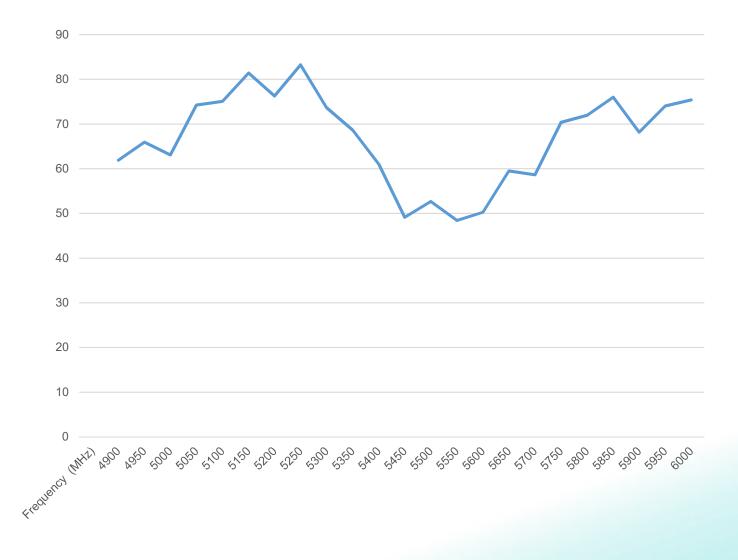
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFIN49NMOHF Efficiency (%)









Description: LOW PROFILE MULTIBAND

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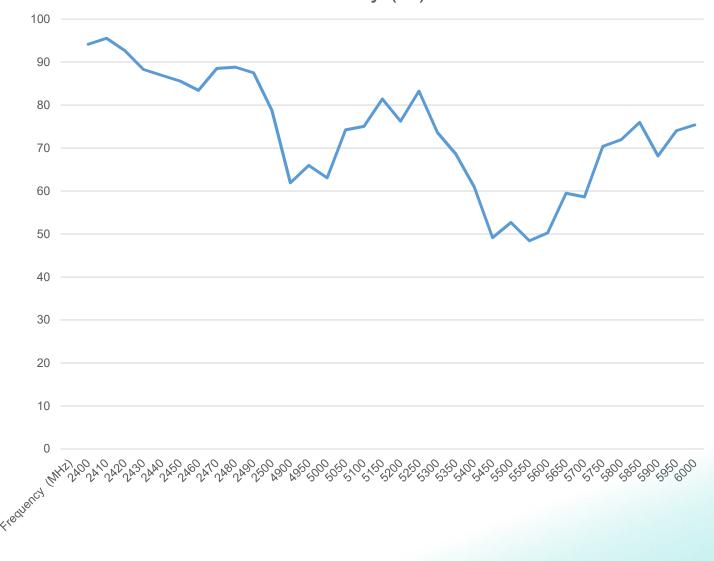
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFINWNMOHF Efficiency (%)







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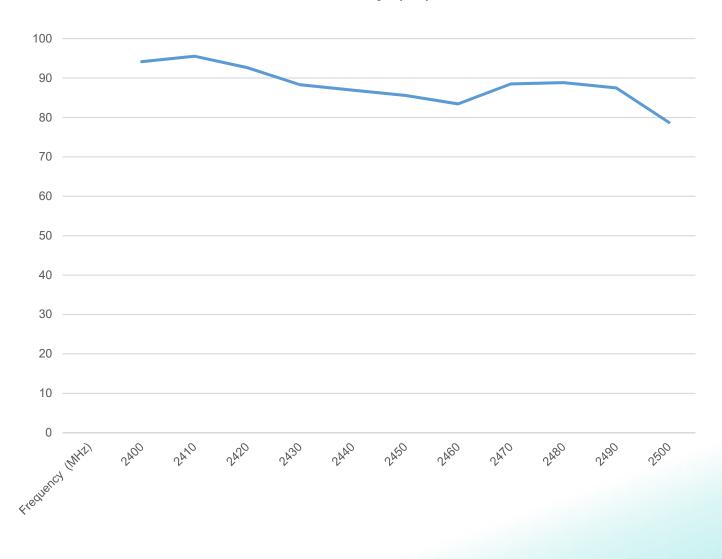
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Series: IceFin

CHARTS

Efficiency(%)

ICEFIN24DMN Efficiency (%)









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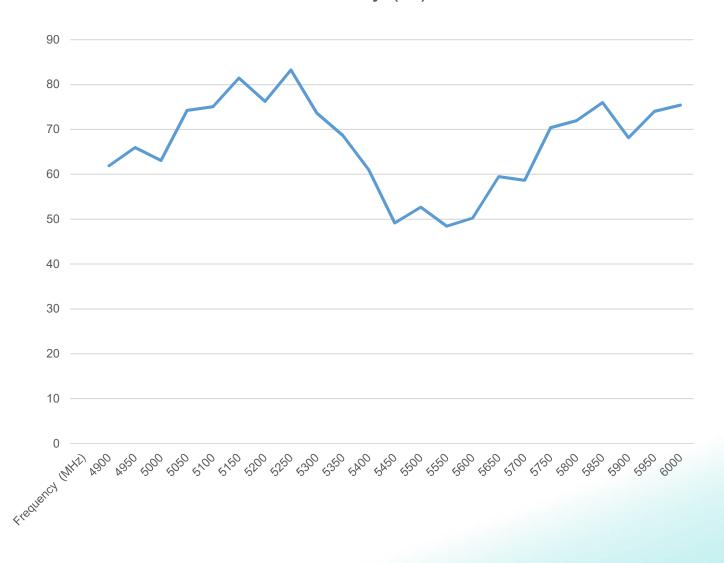
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFIN49DMN Efficiency (%)









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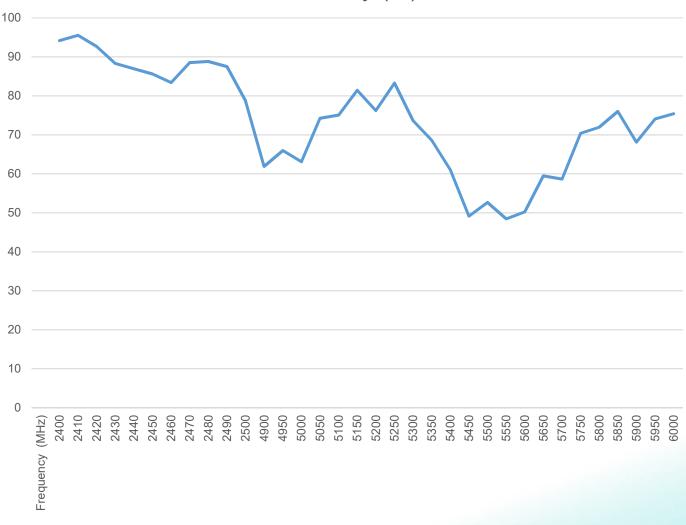
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Efficiency(%)

ICEFINWDMN Efficiency (%)









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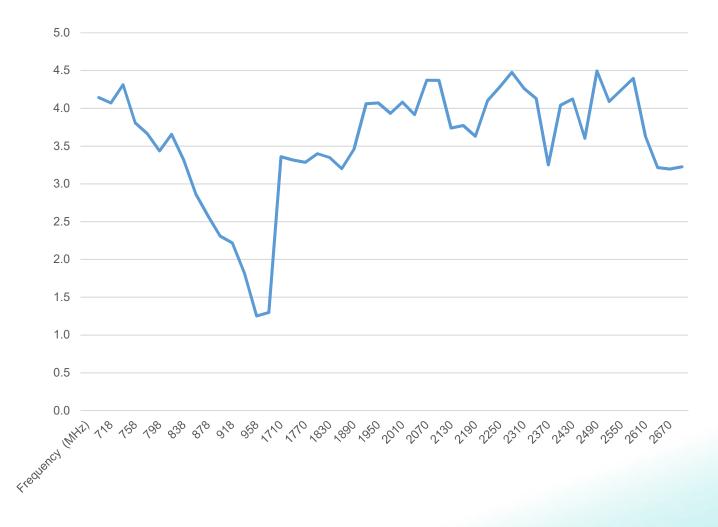
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFINLNMOHF Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

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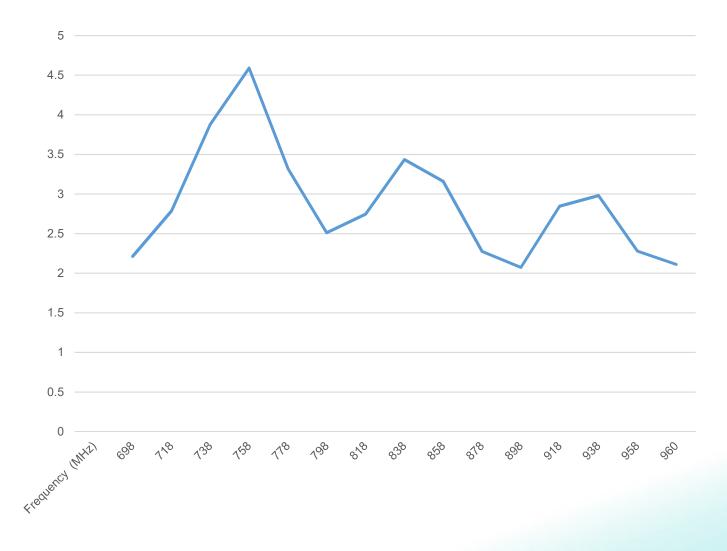
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN698/960NMO Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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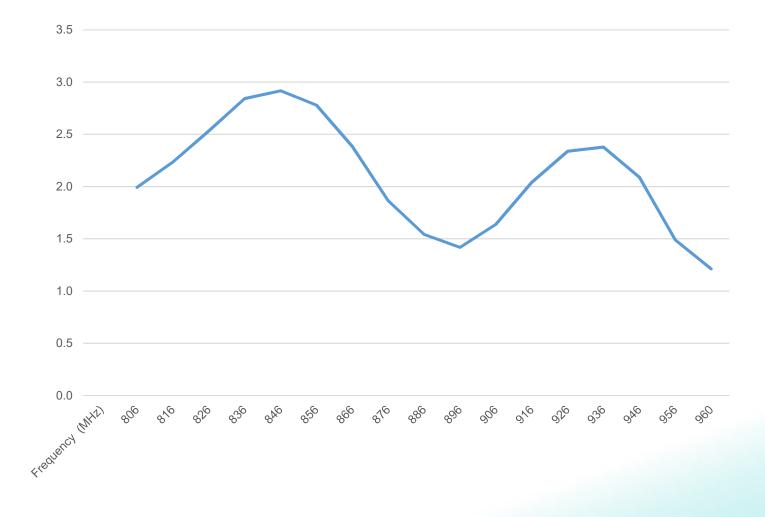
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN806NMO Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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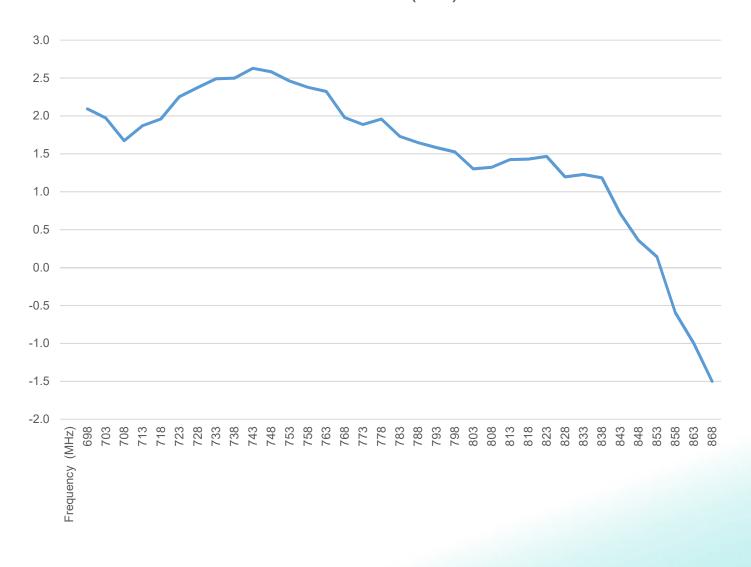
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN698/869DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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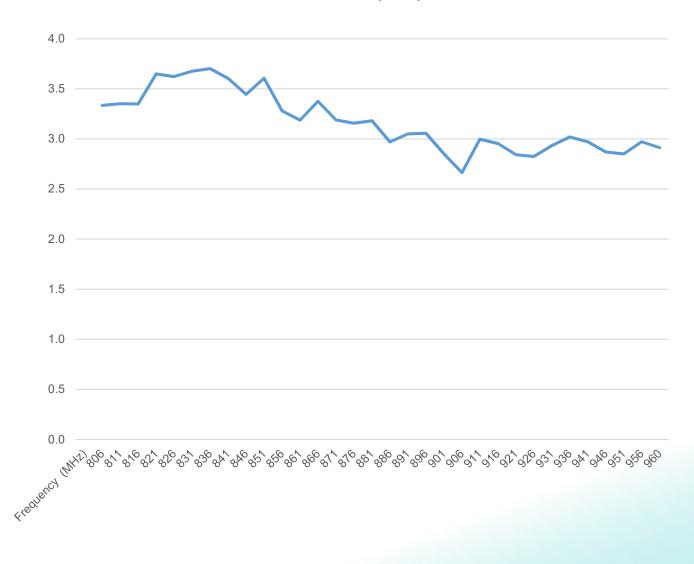
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN806DMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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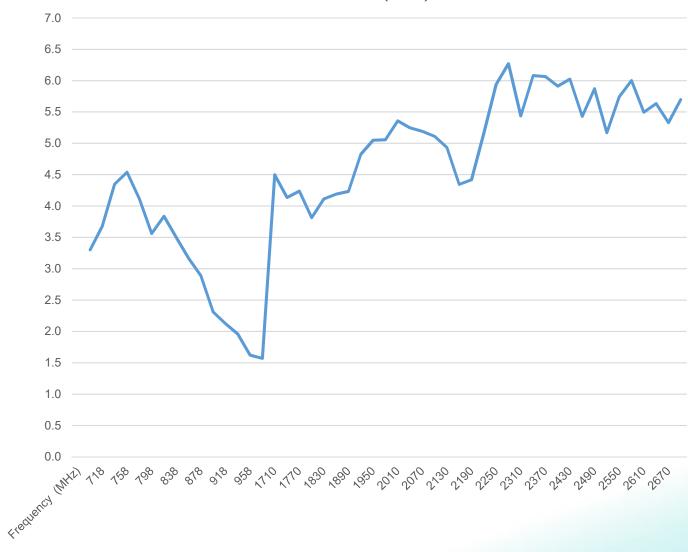
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFINLDMN Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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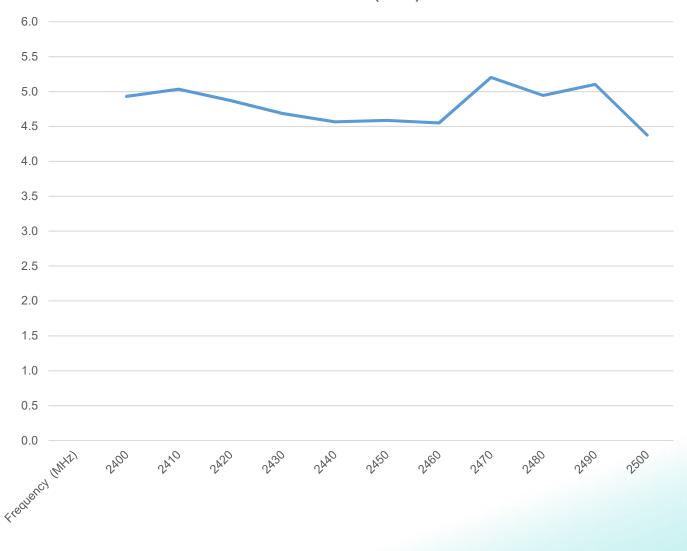
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN24NMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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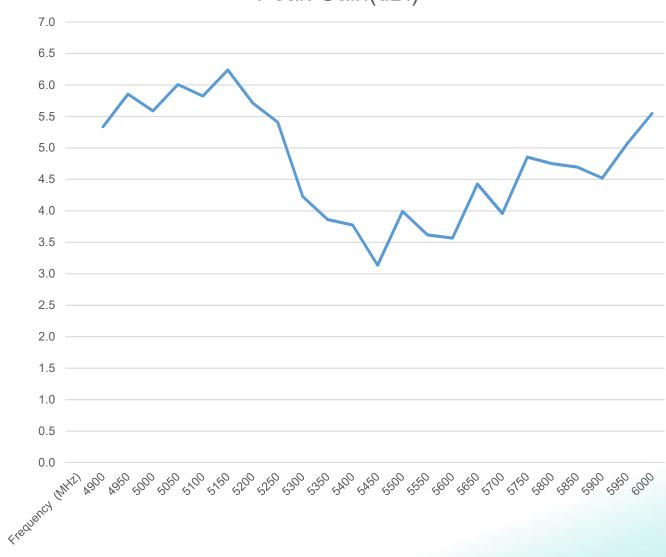
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFIN49NMOHF Peak Gain(dBi)



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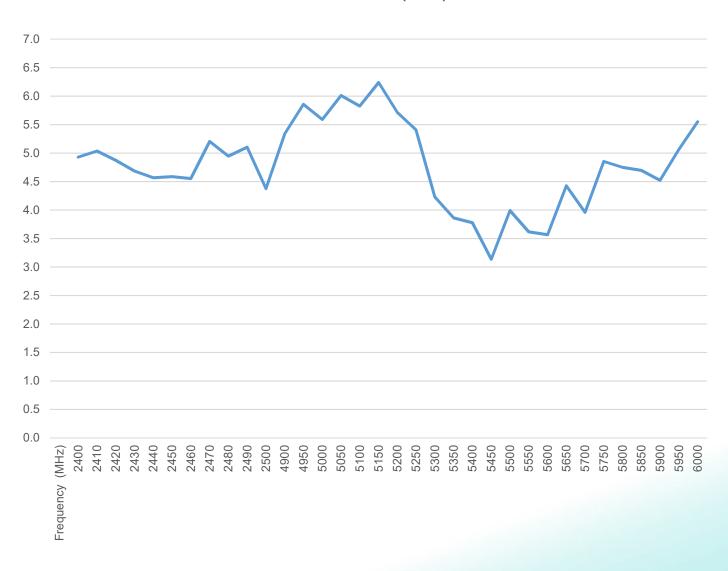
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Peak Gain (dBi)

ICEFINWNMOHF Peak Gain(dBi)









Description: LOW PROFILE MULTIBAND

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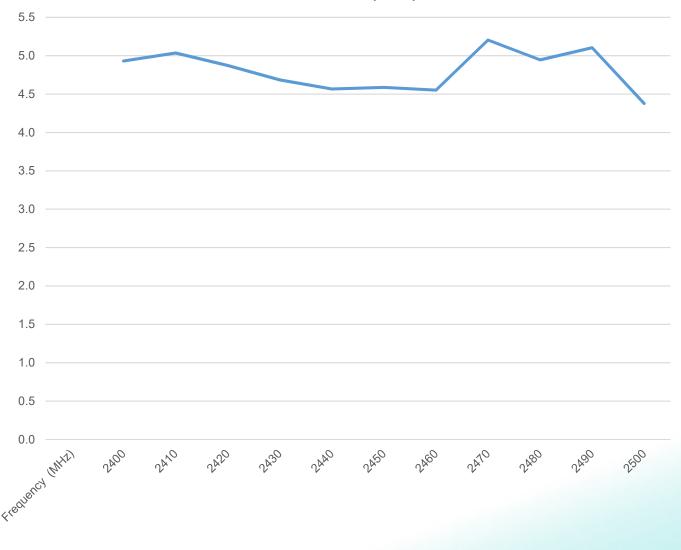
PART NUMBER: ICEFINXXX

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CHARTS

Peak Gain (dBi)

ICEFIN24DMN Peak Gain(dBi)







Description: LOW PROFILE MULTIBAND

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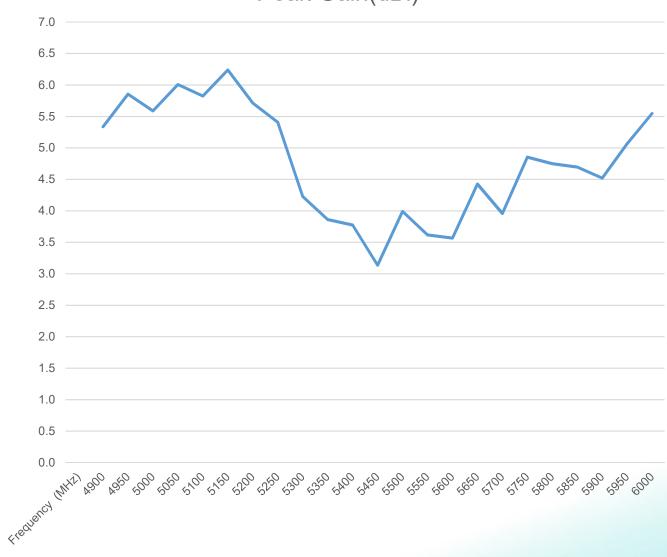
PART NUMBER: ICEFINXXX

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CHARTS

Peak Gain (dBi)

ICEFIN49DMN Peak Gain(dBi)



Issue: 1743





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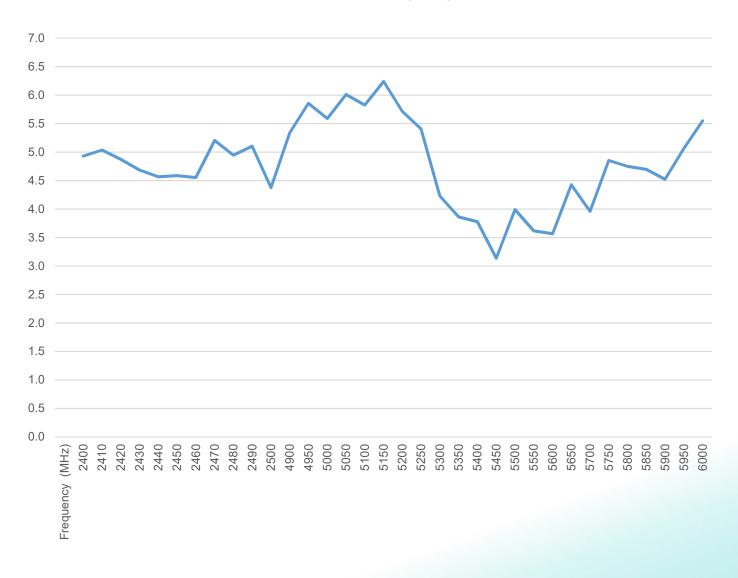
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CHARTS

Peak Gain (dBi)

ICEFINWDMN Peak Gain(dBi)



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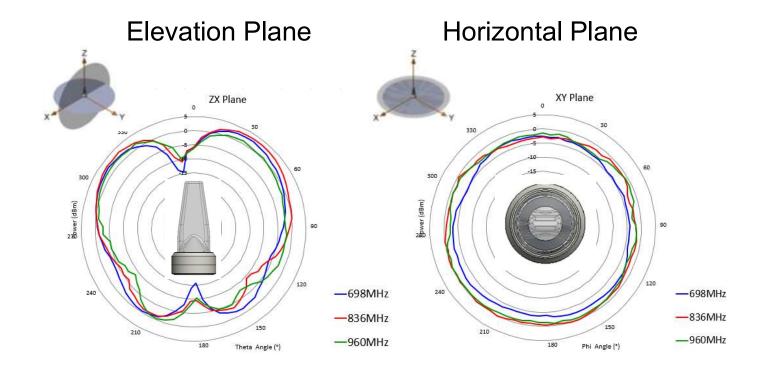
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFINLNMOHF





Description: LOW PROFILE MULTIBAND

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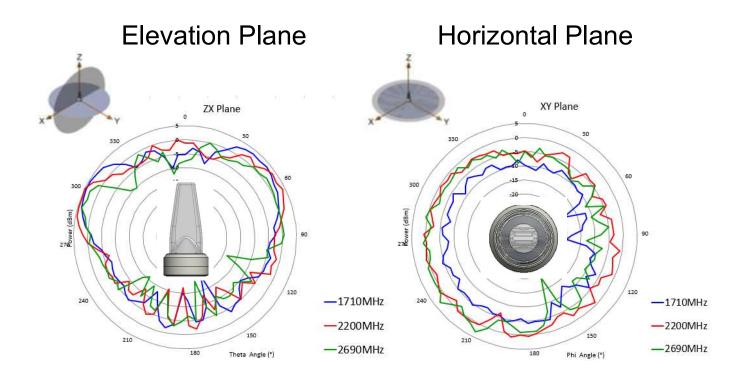
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFINLNMOHF





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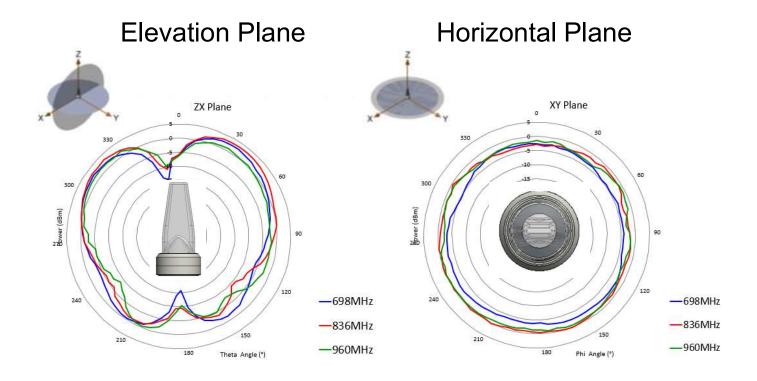
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFIN698/960NMO





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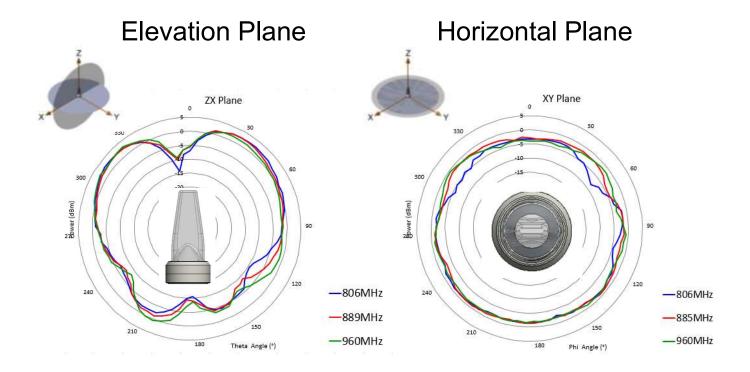
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFIN806NMO





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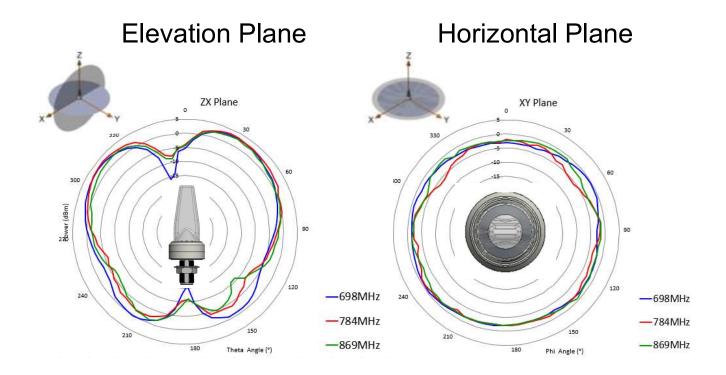
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFIN698/869DMN







Description: LOW PROFILE MULTIBAND

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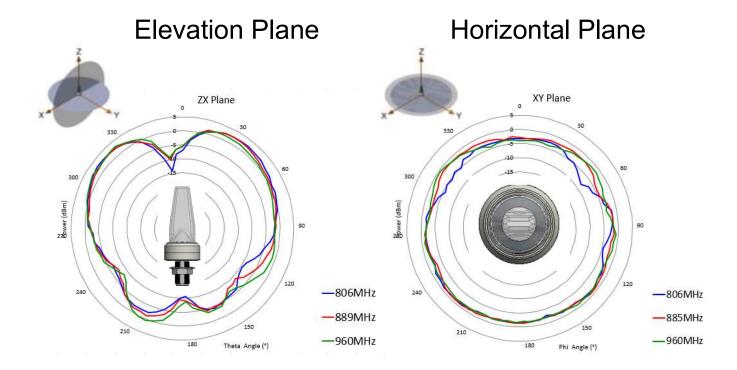
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFIN806DMN





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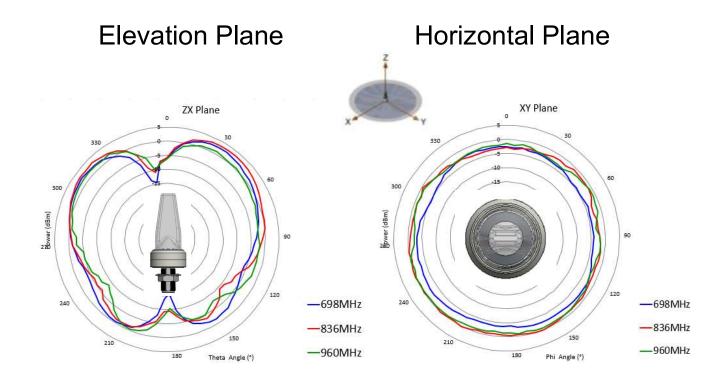
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFINLDMN







Description: LOW PROFILE MULTIBAND

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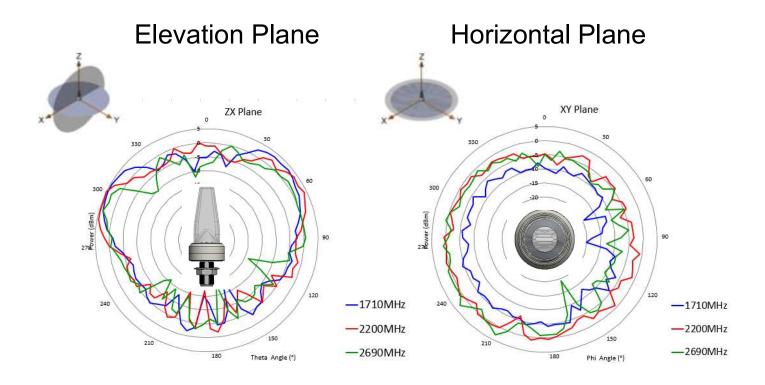
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFINLDMN









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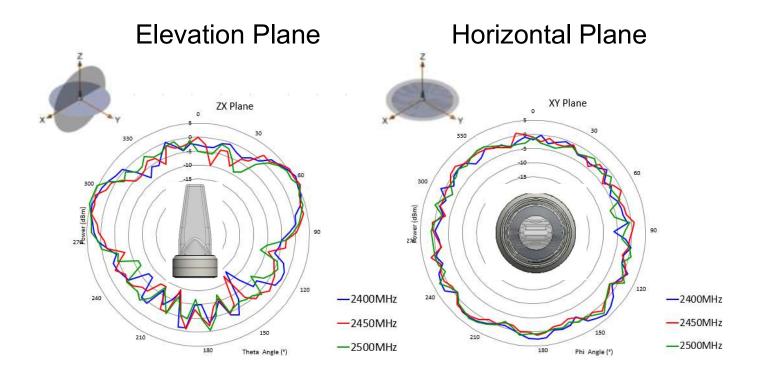
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFIN24NMOHF







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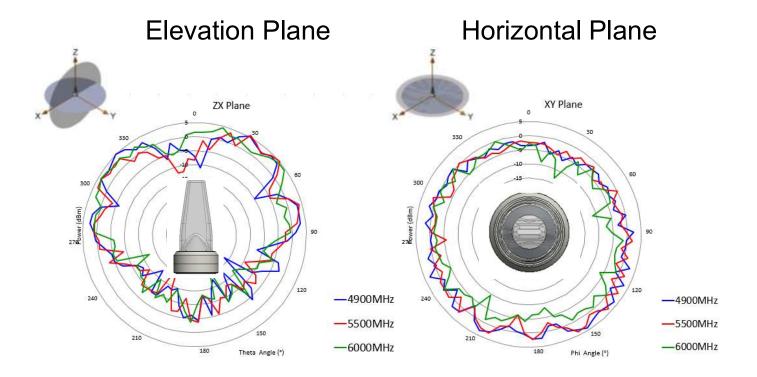
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Free Space Radiation Pattern

ICEFIN49NMOHF







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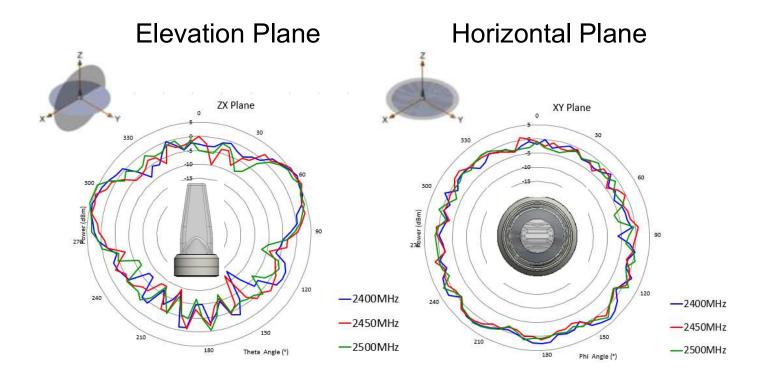
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Free Space Radiation Pattern

ICEFINWNMOHF





Description: LOW PROFILE MULTIBAND

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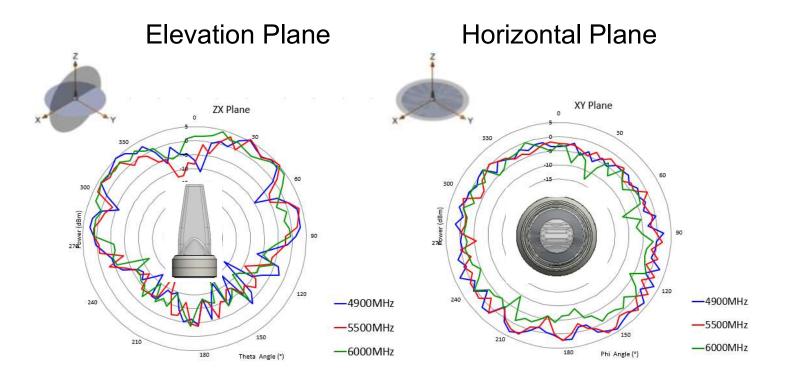
PART NUMBER: ICEFINXXX

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CHARTS

Free Space Radiation Pattern

ICEFINWNMOHF







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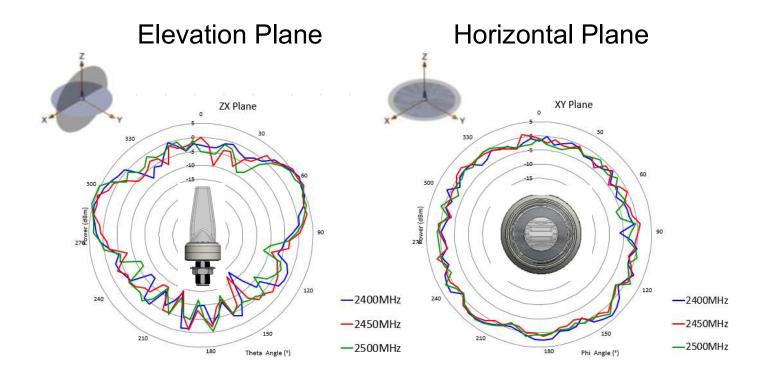
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CHARTS

Free Space Radiation Pattern

ICEFIN24DMN







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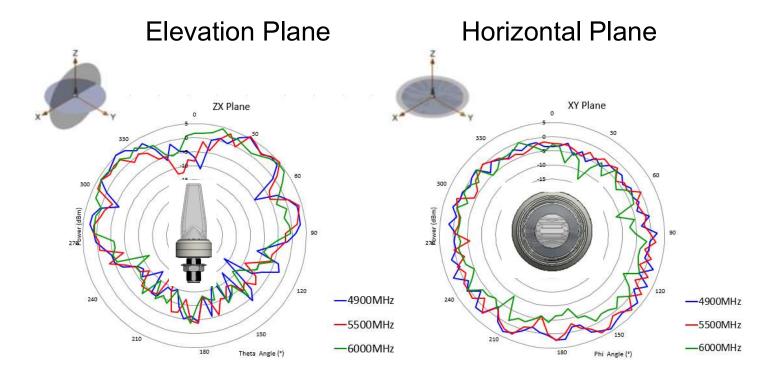
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CHARTS

Free Space Radiation Pattern

ICEFIN49DMN





Description: LOW PROFILE MULTIBAND

ANTENNA

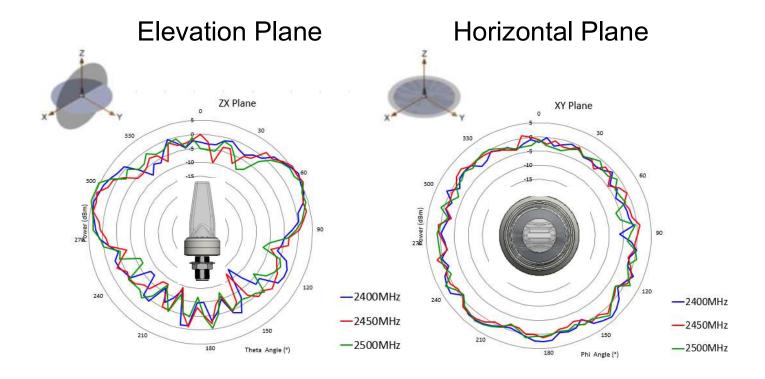
PART NUMBER: ICEFINXXX

Series: IceFin

CHARTS

Free Space Radiation Pattern

ICEFINWDMN





Description: LOW PROFILE MULTIBAND

ANTENNA

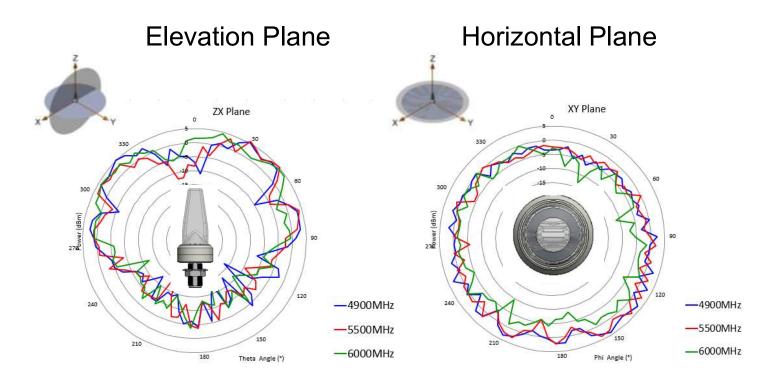
PART NUMBER: ICEFINXXX

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Free Space Radiation Pattern

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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	16 per / Troy
ICEFIN698/960NMO	Clarity	750-960MHz			16 pcs / Tray 32 pcs / Carton
ICEFIN806NMO	Clarity	806-960MHz		NMO Pogo Pin Connector	
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

ROHS

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