



**COMPATIBLE  
ELECTRONICS**

FCC ID: NFX-RCC0001-00

## **EXHIBIT 5**

*STAR NETWORKS AND DIRECTIONAL ANTENNA*

FCC ID: NFX-RCC0001-00  
RadioConnect Corporation

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To: Mr. Scott McCutchan July 10, 1998  
Compatible Electronics, Inc. Ref: 980702-AT-1  
Total Pages: 1

From: Arthur Tanaka  
Email: atanaka@radioconnect.com Voice: 310-338-3388 x 232

Project: RadioWire

Subject: Replay to FCC Response for **FCC ID: NFX-RCC0001-00**

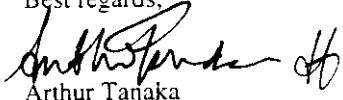
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Dear Scott,

Included with this fax is a Confidentiality Letter, Block Diagrams, copy of update to manual regarding RF safety considerations during installation, and responses to questions posed by the FCC in your letter dated June 30, 1998.

- 1) Confidentiality letter. See attached transmittal Exhibit 1, Ref: 980702-HMF-1 that lists the items to be held confidential.
- 2) Block diagram. Please see attached block diagrams in Exhibit 2. The Block Diagrams included with the application were in the middle of the set of schematics, and could have been mistaken for schematics.
- 3) Re-measure power Yes, we agree that the power can be re-measured. A power meter will be available for use on Monday.
- 4) Installation instructions See attached update to our user's manual "RF Safety Considerations for Installation of RadioWire Modem".
- 5) Star Networks ~~The RadioWire Modem (RWM) does not operate in the Point-Multipoint mode. It can only operate Point-To-Point. We provide the ability for users to configure multiple sets of point-to-point links to provide a star function. Users do this by connecting the Network Interface Modules of several RWMs at a central node. Each RWM at the central node communicates with only one remote RWM.~~
- 6) Restricted Band We will be testing a solution for this problem Saturday, July 11th.
- 7) Processing Gain On 7/6/98 we repeated the Process Gain test using 50 kHz steps across the entire passband of the RWM channel, using the method suggested in the FCC Public Notice #54797 dated July 12, 1995. See the Jamming Test Setup diagram. Also included is a copy of a table from Electronic Communications Handbook by Andrew F. Inglis, McGraw Hill © 1988 showing QPSK and OQPSK with the same (S/N)o. Also included is a graph showing the (S/N)o for QPSK as 13.8 dB for an error rate of  $10^{-6}$  from Digital Line-Of-Sight Radio Links book by A.A.R. Townsend, Prentice Hall © 1988.

Best regards,



Arthur Tanaka

REVISIONS		DESCRIPTION		DATE		APPROVED	
201-E	1.78	C	1125 MAX WAS 12.00 C214 WAS 4.50 BEAMWIDTH WAS .25° ADDED WEIGHT, REDMAN	7-1-97 1/22/98			
C1, D4, B4	D	ADDED ENVIRONMENTS, ADDED NOTES 1 AND 2 ADDED FA=22 FT-LBS, ADDED M4 FT-LBS ADDED M4 HARDWARE CALLOUT ADDED M4 HARDWARE CALLOUT		3-6-98 1SR			
MAR 12 1998 <i>[Handwritten Signature]</i>							
DOCUMENT CONTROL							
<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE .010 UNLESS OTHERWISE SPECIFIED. MACHINED SURFACE FINISHES 125-150. REINFORCED PLATE THICKNESS 125-150. MACHINED DIMS ARE IN INCHES. CONCENTRIC WITH CENTERLINE. INTERIOR HOLE ASSEMBLY. MACHINED DIMS ARE IN INCHES. CONCENTRIC WITH CENTERLINE. INTERIOR HOLE ASSEMBLY.</p>							
<p>CONTRACT NUMBER: <i>[Signature]</i> DATE: <i>[Signature]</i> 3-11-97 TELECO INDUSTRIES INC., 91511 TECHNICAL SPECIFICATIONS EQUATED TO DRAWING</p>							
<p><b>ENVIRONMENTAL:</b></p> <p>WIND SPEED: <u>125 MPH</u> MAX TEMPERATURE: <u>-40°C/-71°C</u> HUMIDITY: <u>20%</u> WITH CONDENSATION BLOWING RAIN: <u>20 MPH</u> 4 IN/HR SOLAR RADIATION: <u>350 BTU/FT<sup>2</sup>/HR</u> THERMAL RADIATION: <u>2.25</u></p>							
<p><b>NOTES:</b></p> <p>1. WIND LOADS AT 125 MPH 1. POWDER COAT, SEMI-GLOSS (20%), COLOR WHITE TEXTURE.</p> <p>2. WIND LOADS AT 125 MPH NEXT ASSY USED ON APPLICATION</p>							
<p>NOTES: UNLESS OTHERWISE SPECIFIED SCALE: <u>1:2</u> UNIT: <u>IN</u> UNIT WT: <u>1</u> SHEET 1 GF 1</p>							

RWM Antenna Options

Antenna Type	Model Right Hand Circular (White Cap)	Model Left Hand Circular (Blue Cap)	Size	Gain	Weight Ant. Only	Wind Load
<b>Helical</b>	250-0001-00	250-0001-01	2 in. dia, 15 in long 5 cm dia, 38 cm long	14 dBi	4.5 lbs. 2 kg	
<b>Dish (Small)</b>	250-0002-00	250-0002-01	24 in. dia, 15 in long 61 cm dia, 38 cm long	19 dBi	13 lbs 6 kg	

Table 2.4 - 1 RWM Antenna Options

Notes:

Electrical Characteristics on all antennas listed above:

Impedance 50 Ohms

VSWR 1.3:1

Return Loss 24 dB

Wind Survivability for all antennas listed above:

105 mph

175 km/hr

***Helical +14 dBi Antenna P/N 250-0001-00***

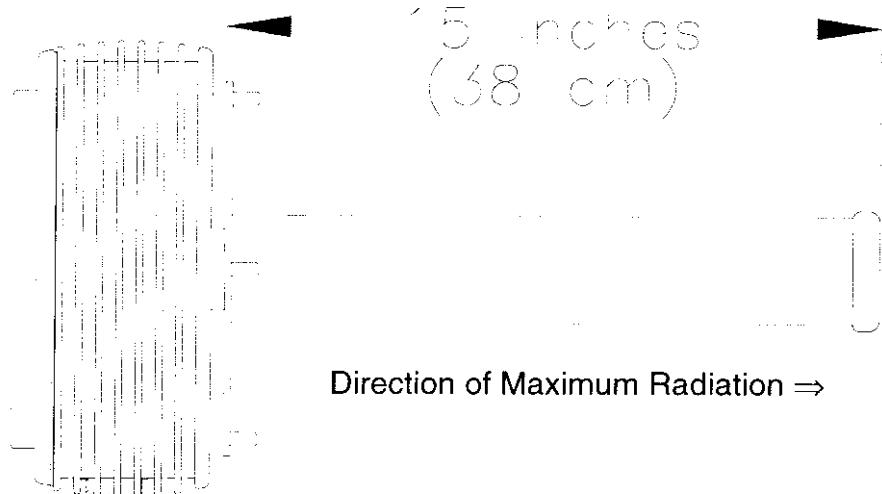


Figure 1 Dimensions:	Approx. 2.1 in [5.3 cm] diameter, 15 [38.1 cm] in length
Weight:	Less than 4.5 lbs. [2 kg.] (Antenna Only)
Electrical Characteristics:	50 ohm; 1:1.3 VSWR
Gain pattern:	14 dBi, 35 degree beam width, right hand or left hand circularly polarized.
Wind Survivability:	105 mph [175 km/h]
Wind Load	0.4 sq. ft. [0.04 sq. m]
Note:	P/N for Right Hand Circular Antenna 250-0001-00 (White Cap)
	P/N for Left Hand Circular Antenna 250-0001-01 (Blue Cap)

**0.6 meter +20 dBi Dish Antenna P/N 250-0002-00**

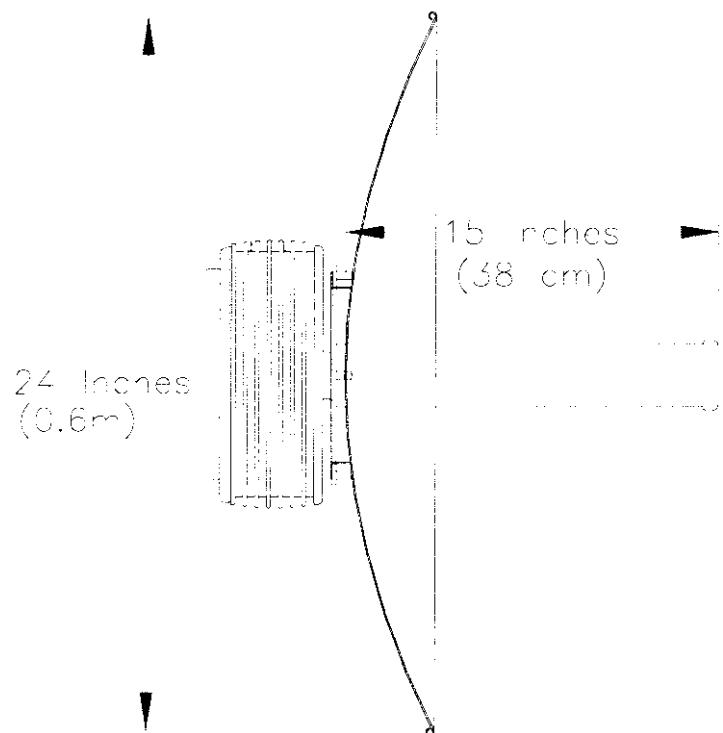


Figure 2 Dimensions:	Approx. 24 in [61 cm] diameter, 15 in [38.1 cm] length
Weight:	Less than 13.5 lbs. [6 kg.]
Electrical Characteristics:	50 ohm; 1:1.3 VSWR
Gain pattern:	19 dBi, 15 degree beam width, right hand or left hand circularly polarized.
Wind Survivability:	105 mph [175 km/h]
Wind Load	3.3 sq. ft. [0.3 sq. m]
Note:	P/N for Right Hand Circular Antenna 250-0002-00 (White Cap)
	P/N for Left Hand Circular Antenna 250-0002-01 (Blue Cap)