SPECIFICATION

Specification No : RE1- 19108

Part No. : **RE-01**

Product Name : **Orion RFID antenna**

Features : 240 x 240 x 24 mm
CFD-200 Co-axial cable
TNC Jack Reverse

REVISION STATUS

Version	Date	Page	Revision Description	Prepared	Approved
01	January 17th 2005	All	New format	TW Product Centre	Ronan Quinlan

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1.0 System

This waterproof robust RFID antenna is based on smart Taoglas antenna technology. It consists of a metal patch antenna in a waterproof structure.

2.0 General

2.1 Environmental Conditions

2.1.1	Operation Temperature	-30°C to + 80°C
2.1.2	Storage Temperature	-40°C to + 85°C
2.1.3	Relative Humidity	40% to 95%

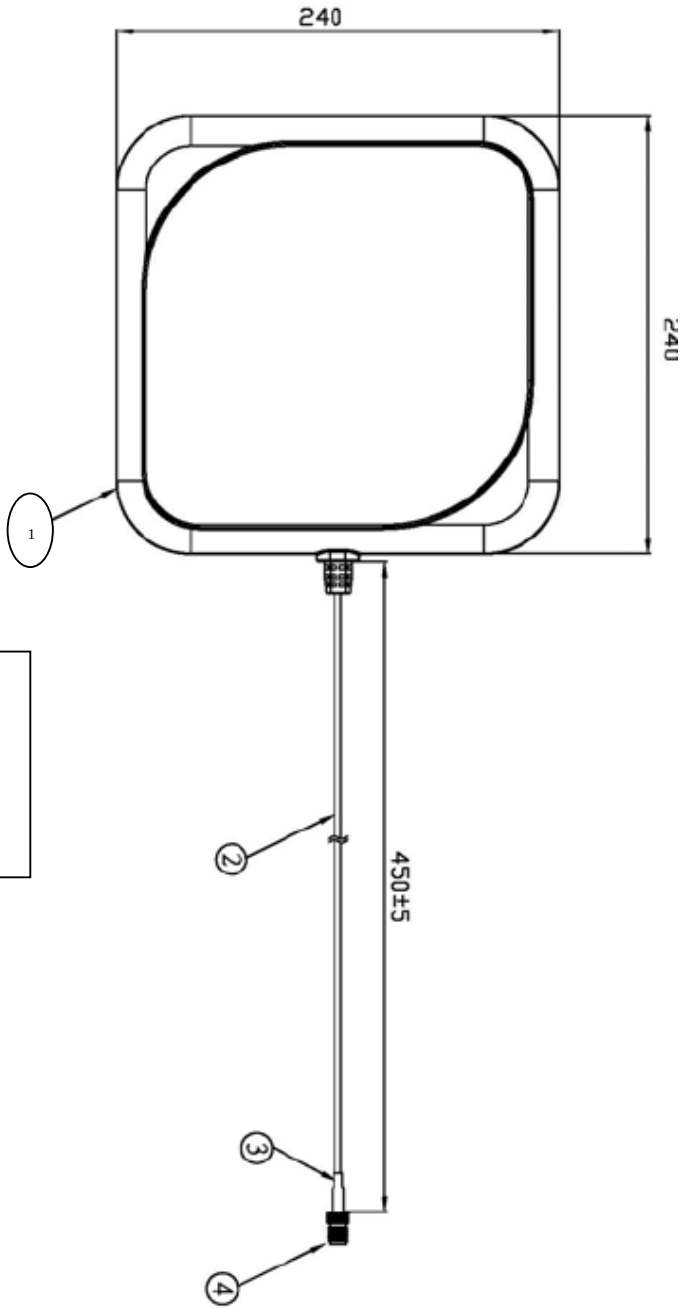
2.2 Cable & Connector

2.2.1	RF Cable	CFD200 Coaxial Cable L = 45 +/- 3 mm Black
2.2.2	RF Connector	TNC Jack Reverse

3.0 Antenna

3.1	Frequency Range	862 - 870MHz
3.2	VSWR	1.92max
3.3	Return Loss	-10 dB max
3.4	Impedance	50 Ω
3.5	Polarization	Linear Vertical
3.6	Peak Gain	9.3dBi at 868Mhz
3.7	Admitted power	10w
3.8	Half power beamwidth	75° @ horizontal
3.9	Antennna Cover	ABS (white)
3.10	Waterproof Rating	IP65

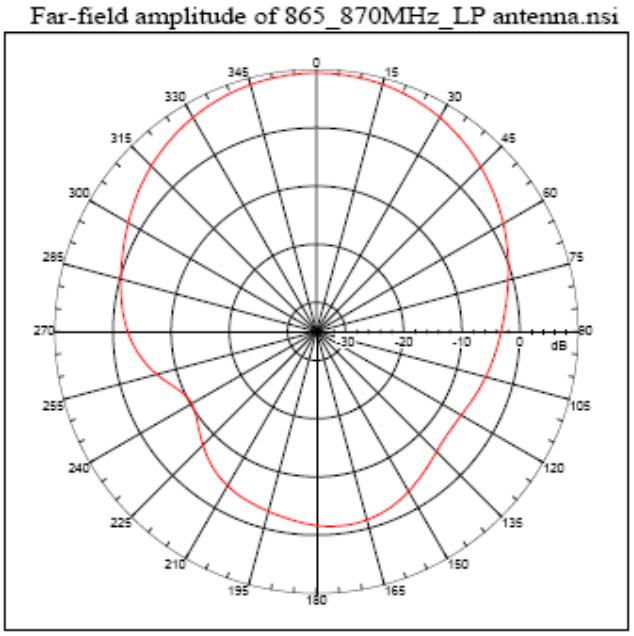
4.0 Mechanical Dimensions



1. Antenna Cover ABS Colour: WY-008
2. Cable: CFD-200
3. Tube: Heat shrink tube
4. Connector: TNC Jack reverse

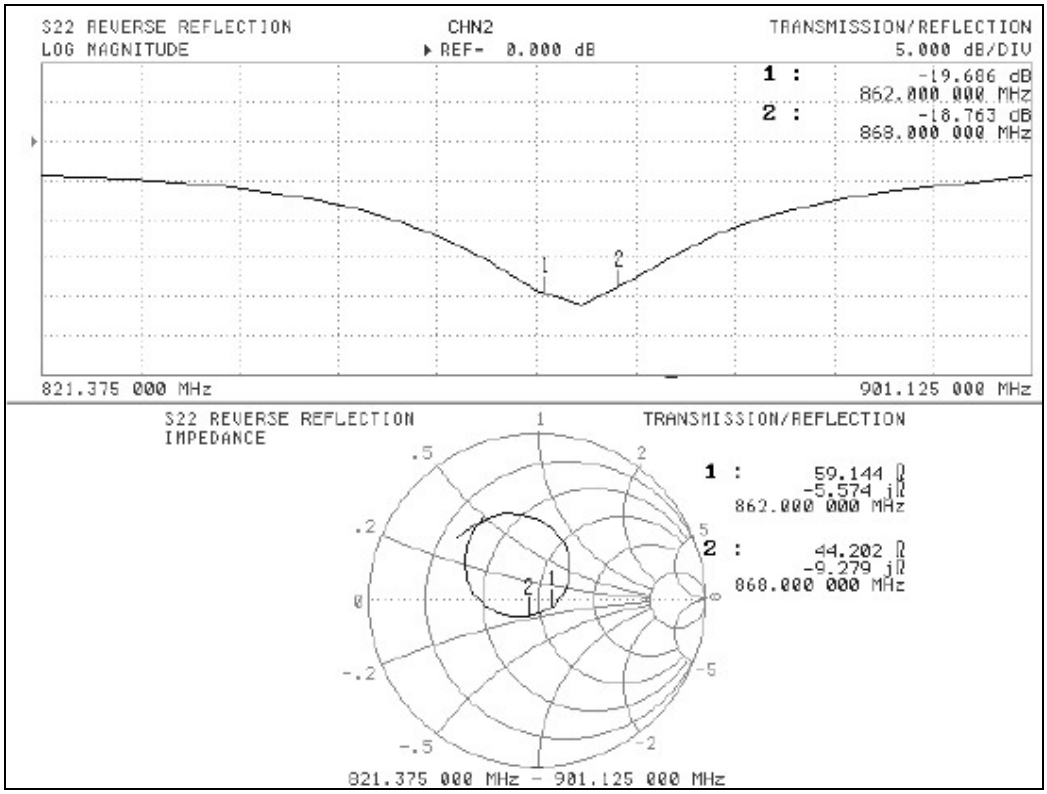
5.0 Antenna Electrical Characteristics

5.1 Radiation pattern



Frequency: 868MHz

5.2 Return Loss & Smith Chart



6.0 Environmental Testing

Test Group		Group1	Group2	Group3
Initial	Function Appearance	○	○	○
1	Thermal Shock Test	○		
2	High Temperature Test		○	
3	Cold Test		○	
4	Rain Test		○	
5	Salt Spray Test			○
Final	Function Appearance	○	○	○
Judgment		PASS	PASS	PASS

See environmental test report for details