

IM21-PRT RFID Module

Antenna Details

Annexure - VI

Model : IM21-PRT	FCC ID: HD5-IM21	IC: 1693B-IM21
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Annexure - VI : RFID Antenna and Coupler Details

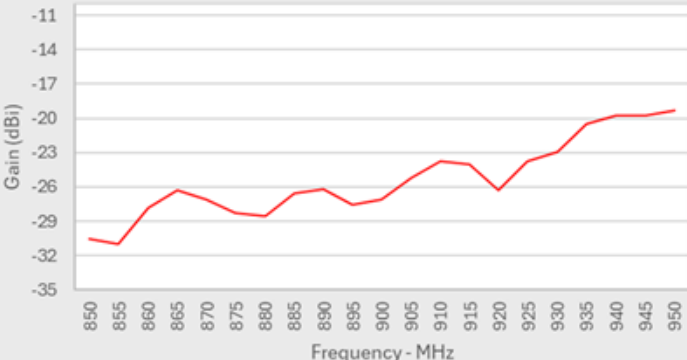
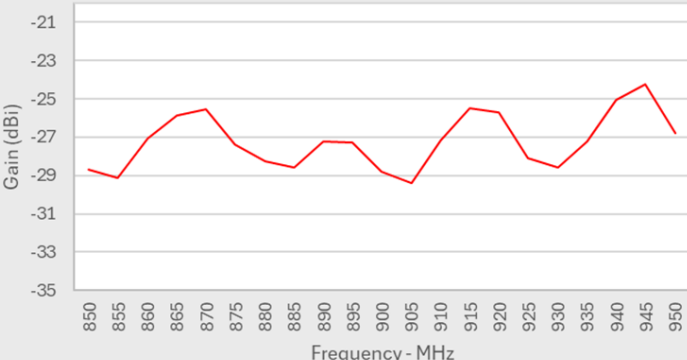
Following are the list of RFID Antenna's and Couplers used along with IM21 RFID Module.

Sl. No	Coupler	Design	Make	Model	Max Gain (dBi)
1	PCB – RFID Coupler	Microstrip line fed aperture coupler	Laird Technologies*	MAF95123-1 / 234-079-0600	-19.3
		Microstrip line fed aperture coupler	Laird Technologies*	1-971140-001	-24.2
2		Microstrip line fed aperture coupler	Unictron Technologies*	H2B1JH1A1H0200 / 710000068100	-23.0
3		Loop aperture coupler	Honeywell	LUPUS14V2	-14.0
4		stripline coupler	Honeywell	LUPUS32	-27.2
5		Loop aperture coupler	Honeywell	CORVUS10	-20.5

*Custom design for Honeywell products only

The IM21-PRT RFID Module and Antennas are having Unique antenna Coupling Mechanism.

Annexure - V : RFID Couplers High Level Details

Model	Gain (dBi) Plot																																												
MAF95123-1 / 234-079-0600 RF cable Length = 60cm. Type of Antenna Coupling is MMCX Dimensions : 112mm X 14.85mm X 1.17mm (L x W x D)	RFID Coupler Gain  <table border="1"> <caption>RFID Coupler Gain Data (Approximate)</caption> <thead> <tr> <th>Frequency (MHz)</th> <th>Gain (dBi)</th> </tr> </thead> <tbody> <tr><td>850</td><td>-32</td></tr> <tr><td>855</td><td>-31</td></tr> <tr><td>860</td><td>-28</td></tr> <tr><td>865</td><td>-26</td></tr> <tr><td>870</td><td>-27</td></tr> <tr><td>875</td><td>-28</td></tr> <tr><td>880</td><td>-29</td></tr> <tr><td>885</td><td>-26</td></tr> <tr><td>890</td><td>-26</td></tr> <tr><td>895</td><td>-27</td></tr> <tr><td>900</td><td>-27</td></tr> <tr><td>905</td><td>-25</td></tr> <tr><td>910</td><td>-23</td></tr> <tr><td>915</td><td>-23</td></tr> <tr><td>920</td><td>-26</td></tr> <tr><td>925</td><td>-23</td></tr> <tr><td>930</td><td>-22</td></tr> <tr><td>935</td><td>-20</td></tr> <tr><td>940</td><td>-20</td></tr> <tr><td>945</td><td>-20</td></tr> <tr><td>950</td><td>-20</td></tr> </tbody> </table>	Frequency (MHz)	Gain (dBi)	850	-32	855	-31	860	-28	865	-26	870	-27	875	-28	880	-29	885	-26	890	-26	895	-27	900	-27	905	-25	910	-23	915	-23	920	-26	925	-23	930	-22	935	-20	940	-20	945	-20	950	-20
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