











Antennas - Overview - HENSOLDT 2017




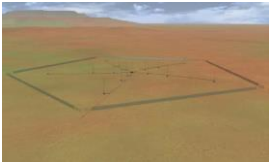
Direction Finding

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Activ Ant.	Passiv Ant.	Size	Weight
	MRA 1228 U2 DF IF antenna	200 MHz	1000 MHz	X	X		---	X	D: 0.84 m H: 0.34 m	10 kg
	MRA 1228 U3 DF IF antenna	1000 MHz	3000 MHz	X	X		---	X	D: 0.37 m H: 0.37 m	25 kg
	MRA 1228 V DF IF antenna	20 MHz	300 MHz	X			---	X	D: 2.55 m H: 1.30 m	15 kg
	MRA 1228 VU3 DF IF antenna	20 MHz	3000 MHz	X			---	X	D: 2.55 m H: 3.64 m	75 kg
	MRA 1229 VU3 semi mobile application, V antenna automatic foldable	20 MHz	3000 MHz	X			---	X	D1: 2.65 m D2: 0.84 m H: 3.67 m	93 kg
	MRA 1229 V automatic foldable	20 MHz	300 MHz	X			---	X	D1: 2.65 m D2: 0.65 m H: 1.30 m	41 kg

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Activ Ant.	Passiv Ant.	Size	Weight
	MRA 1264 HV HF crossed loop VHF Adcock	1 MHz	200 MHz	X	X		---	X	H: 1.00 m B: 0.86 m W: 0.86 m	15 to 21 kg (kind of version)
	MRA 1271 HVU4 RCS optimized DF IF / WW antenna © AIRBUS DEFENCE AND SPACE GmbH	1.5 MHz 30 MHz 30 MHz	6000 MHz 6000 MHz 2000 MHz	X	X		X (HF)	X (VHF - UHF)	D: 1.01 m H: 2.20 m	46 – 89 kg (kind of version)
	MRA 1282 HVU3 DF IF antenna HF crossed loop VHF Adcock	1 MHz	3000 MHz	X	X		---	X	H: 4.36 m B: 0.86 m W: 0.86 m	133 kg. max. added top load up to 110 kg.
	MRA 1282 HVU3 and RESM combination	CESM 1 MHz RESM 0.7 GHz or 0.7 GHz	3000 MHz 18 GHz or 40 GHz	X	X		X (RESM partly)	X	D: 0.90 m H: 5.27 m	232 kg
	MRA 1292/2 MH crossed loop	250 kHz	30 MHz	X	X		X	---	D: 0.93 m H: 0.17 m	38 – 48 kg
	MRA 1294/2L (Submarine)	10 kHz	2300 kHz (above water) 30 kHz (under water)		X		X	---	D: 0.50 m H: 0.16 m	15 kg 54 kg with radome

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Activ Ant.	Passiv Ant.	Size	Weight
	MRA 1297 fixed or semi-mobile	1.0 MHz	30 MHz	X			X	---	H: 2.67 m B: 1.43 m W: 1.43 m	11 kg
	MRA 1274 VU2 HR High Resolution IF array	20 MHz	1300 MHz	X	X	X	X	---	D: 1.06 m H: 0.26 m	20 kg
	MRA 1275 U3 HR High Resolution IF array	1000 MHz	3000 MHz	X	X	X	---	X	D: 0.50 m H: 0.20 m	13 kg

Interferometric and Super Resolution DF Systems

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	activ Ant.	passiv Ant.	Size	Weight
	MRA 2000 /7 or /9 IF System, fixed or semi-mobile	1 MHz	30 MHz	X			X	---	type : /7 90° - 80 m type: /9 90° - 125 m	11 kg per ea.
	MRA 2004 /7 or /9 IF System, fixed or semi-mobile	1.5 MHz	30 MHz	X			---	X	type : /7 90° - 80 m type: /9 90° - 125 m	8 kg per ea.
	MRA 2005 /7 or /9 IF System, fixed or semi-mobile	1 MHz	30 MHz	X			X	---	/7 90° - 80 m /9 90° - 125 m	9 kg per ea.
	MRA 2101 PGA3 H-SR 3 base Pentagram for HF IF and Super Resolution DF System	1 MHz	30 MHz	X			---	X	---	---

Monitoring


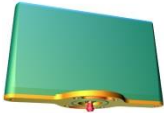
Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	activ Ant.	passiv Ant.	Size	Weight
	MRA 1200/4H Linear Omni Rx	1.5 MHz	30 MHz	X			---	X	H: 7.79 m D: 0.05 m	8 kg
	MRA 1297/5 Linear / Loop Omni Rx	0.01 MHz	30 MHz	X			X	---	H: 2.67m B: 0.30 m W: 1.43 m	11 kg
	MRA 1297/6 Linear Omni Rx	0.01 MHz	30 MHz	X			X	---	H: 2.67m B: 0.30 m W: 0.30 m	9.5 kg
	MRA 1239 VU3 Omni Rx	20 MHz	3000 MHz	X	X		X	---	D: 0.18 m H: 0.48 m	6 kg
	MRA 1239 VU4 Omni Rx	20 MHz	6000 MHz	X	X		X	---	D: 0.26 m H: 0,52 m	10 kg
	MRA 0231 JU3 Discone	500 MHz	3000 MHz	X	X		---	X	D: 0.21 m H: 0.29 m	1.9 kg
	MRA 0233 JU4 Discone	1500 MHz	6000 MHz	X	X		---	X	D: 0.21 m H: 0.29 m	1.5 kg

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	activ Ant.	passiv Ant.	Size	Weight
	MRA 0301 RVU vertically polarized broadband antenna	20 MHz	500 MHz	X		X	X	---	D: 0.16 m H: 0.37 m D2: 0.27m	6 kg
	MRA 0302 RU2 vertically polarized broadband antenna	500 MHz	1300 MHz	X		X	X	---	D: 0.21 m H: 0.58 m D2: 0.27m	6 kg
	MRA 0303 RU3 broadband antenna, vertically and horizontally polarized	1300 MHz	3000 MHz	X		X	X	---	D: 0.16 m H: 0.58 m D2: 0.27m	6 kg
	MRA 0305 RVU2 active receiving dipole	20 MHz	1300 MHz	X	X	X	X	---	H: 0.26m B: 0.13 m W: 0.05 m	0.8 kg
	MRA STA 10 A/D Linear Rx	0.25 MHz	30 MHz	X	X		X	---	D: 0.15 m H: 1.12 m	2.1 kg power supply unit 1.3 kg
	MRA 7015 HF Linear Rx	0.01 MHz	30 MHz	X	X		X	---	D: 0.10 m H: 0.95 m	2.4 kg power supply unit 1.3 kg
	MRA 0234/50 RH Formato	1 MHz	30 MHz	X			---	---	L: 2x 25 m	15.5 kg


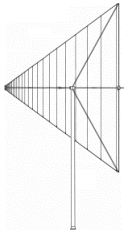
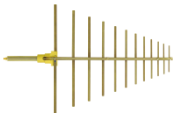
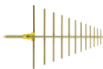
Jamming

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Gain	Power	Size	Weight
	MRA 0231 JU3 Discone	500 MHz	3000 MHz	X	X		0 ±3 dBi	500 W	D: 0.21 m H: 0.29 m	1.9 kg
	MRA 0233 JU4 Discone	1500 MHz	6000 MHz	X	X		0 ±3 dBi	200 W	D: 0.21 m H: 0.29 m	1.5 kg
	MRA 0234 JH Tx / Rx /95 JH /75 JH /50 JH Formato	1.5 MHz 2.0 MHz 3.0 MHz	30 MHz 30 MHz 30 MHz	X			dBi typ. -7...+7 -3...+6 -2...+8	1000 W	L: 2x 48 m L: 2x 38 m L: 2x 25 m H: 12 m	25 kg 23 kg 21 kg
	MRA 0239 JV/1 Dual Wide-band Monopole	130 MHz	500 MHz	X			0..+5 dBi	20 W	D: 0.13 m H: 0.51 m	1.0 kg
	MRA 0240 JV/1 Dual Wide-band Monopole	130 MHz	500 MHz	X			0 ±3 dBi	20 W	W: 0.25 m D: 0.26 m H: 0.91 m	0.8 kg




Counter-RCIED

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Gain	Power	Size	Weight
	MRA 0238 JV Omni whip	100 MHz	330 MHz	X	X		5 dBi typ.	200 W	D: 0.12 m NATO H: 0.60 m	2.5 kg
	MRA 0241 JU 2D Monopole	250 MHz	500 MHz	X	X		4.5 dBi typ.	200 W	W: 0.30 m D: 0.12 m NATO H: 0.18 m	ca. 1 kg


LPDA

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Gain	Power	Size	Weight
	MRA 0131 JVU LPD foldable antenna	20 MHz	500 MHz	X			typ. 4.5 dBi	1 kW	L: 5.45m H: 7.75 m,	60 kg,
	MRA 0132 JVU LPD foldable, weight reduced version	20 MHz	500 MHz	X			typ. 4.5 dBi	1 kW	L: 5.45 m H: 7.75 m W: 0,20 m folded condition L: 2.0 m H: 0.3 m W: 0.5 m	35 kg
	MRA 0133 JU3 LPD	400 MHz	3000 MHz	X	X		8 dBi typ.	300 W	L: 0.60 m H: 0.40 m W: 0.04 m	1.0 kg
	MRA 0133 JU4 LPD	1000 MHz	6000 MHz	X	X		8 dBi typ.	200 W	L: 0.33 m H: 0.20 m W: 0.04 m	0.6 kg

Electronics

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Gain	Power	Size	Weight
	AS 2001/2 Antenna Switch HF	0.1 MHz	30 MHz	X	X		---	---	L: 0.30 m W: 0.27 m H: 0.12 m	5 kg
	SCLO 24.4/IP66 Linearly Regulated Power Supply	Input 230 VAC	Output 24 V ; 4 A	X	X		---	---	L: 0.33 m W: 0.23 m H: 0.11 m	3 kg
	GPP0100 Adapter box with Cable Set	for long distance of control and power cable to AS 2000 series	---	X	X		---	---	L: 0.14 m W: 0.20 m H: 0.09 m	3 kg w/o cables

Accessories

Picture	Product Code	Freq.-min	Freq.-max	Land	Sea	Air	Gain	Power	Size	Weight
	Tripod Stand and Ground Spikes for semi-mobile antennas	---	---	X			---	---	D: 2.00 m H: 0.13 m	11 kg