Appendix A – MET Technical Information

		Handheld - Small	Handheld - Smartphone	Handheld - Rugged	Asset Tracking	Portable	Semi-Fixed (Cobham Antenna)	Semi-Fixed (Hughes Antenna)	Vehicular - Large	Vehicular- Small	Maritime – Large	Maritime - Small
Antenna Model		Morelos Low Profile (RUT)	Morelos Stub (RUT)	Morelos Stub (RUT)	Morelos Stub (RUT)	Morelos Portable (RUT)	Morelos Semi-Fixed (RUT)	Morelos Semi-Fixed (RUT)	Morelos Vehicular Large (RUT)	Morelos Vehicular Small (RUT)	Morelos Maritime Large (RUT)	Morelos Maritime Small (RUT)
Antenna Manufacturer		Hughes	Maxtena	Maxtena	Maxtena	Scan Antenna A/S	Cobham Antenna systems	Hughes	Spacecom	Spacecom	Spacecom	Spacecom
Number of Units		5	5	5	5	5	5	5	5	5	5	5
Antenna transmit gain	**- dBi @ 1626.5-1660.5 MHz**	-0.36	1.5	1.5	1.5	11.8	17	13.2	11.98	10.75	11.98	10.6
Antenna receive gain	**- dBi @ 1525.0 to 1559.0 MHz**	-0.36	1.5	1.5	1.5	12	17	12.5	12.64	10.55	11.52	10.4
Terminal High Power Amplifier Power Output	**- Watts**	0.3	1.0	1.0	1.0	0.7	0.6	1.5	4.0	2.7	4.0	2.8
Terminal max EIRP	**- dBW (W)**	-5 (0.3)	1.5 (1.4)	1.5 (1.4)	1.5 (1.4)	10.2 (10.5)	15 (31.6)	15 (31.6)	18 (63.1)	15 (31.6)	18 (63.1)	15 (31.6)
Directional		No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix A – MET Technical Information

		Handheld - Small	Handheld - Smartphone	Handheld - Rugged	Asset Tracking	Portable	Semi-Fixed (Cobham Antenna)	Semi-Fixed (Hughes Antenna)	Vehicular - Large	Vehicular- Small	Maritime – Large	Maritime - Small
Beamwidth		N/A	N/A	N/A	N/A	3 dB	3 dB	3 dB	3 dB	3 dB	3 dB	3 dB
Horizontal Orientation (+/- deg)		N/A	N/A	N/A	N/A	22	12	17	10	25	18	18
Vertical Orientation (+/- deg)		N/A	N/A	N/A	N/A	22	12	17	24	20	22	28
Tx Polarization		LHCP	LHCP	LHCP	LHCP	LHCP	LHCP	LHCP	LHCP	LHCP	LHCP	LHCP
Tx Max bandwidth		117ksps	117ksps	117ksps	117ksps	117ksps	117ksps	117ksps	117ksps	117ksps	117ksps	117ksps
Tx Min bandwidth		23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps	23.4ksps
Modulation		□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK	□/4-QPSK 16-APSK