

Also available as a true multi-receiver unit.  
Enabling parallel monitoring, geolocation & analysis.



Radio Monitoring



# Transportable Monitoring

LS OBSERVER

Transportable Monitoring Unit (TMU) 318w

# TECHNICAL DETAILS LS OBSERVER TMU 318w

RF Characteristics		
RF Characteristics	<b>Frequency range</b>	100 kHz to 18 GHz
	<b>Scanning speed</b>	up to 40 GHz/s
	<b>Max. input level</b>	+16 dBm, 0 VDC
	<b>Instantaneous bandwidth<sup>1</sup></b>	up to 40 MHz
	<b>Frequency accuracy</b>	GPS disciplined, without GPS 0.15 ppm

  

Connectivity		
Connectivity	<b>RF antenna input</b>	1x APC 3.5-Type, opt. 4-to-1 antenna switch or diplexer
	<b>External GPS antenna input</b>	yes
	<b>Wired networking</b>	1x Gigabit-Ethernet
	<b>Wireless networking</b>	UMTS, LTE
	<b>Wireless local networking</b>	opt. WiFi (802.11 b/g/n)

  

Geolocation		
Geolocation	<b>Direction Finding (DF)</b>	yes, with optional directional antenna or AoA 1xx DF antenna system
	<b>Power Difference of Arrival (PDoA)<sup>2</sup></b>	yes
	<b>Time Difference of Arrival (TDoA)<sup>3</sup></b>	yes
	<b>GPS receiver</b>	yes
	<b>GPS antenna input</b>	1x SMA, antenna included

  

Storage		
Storage	<b>Storage time of raw data<sup>4</sup></b>	up to 30 days
	<b>Storage time of statistic data<sup>5</sup></b>	up to 2 years

  

Environmental Parameters		
Environmental Parameters	<b>Ruggedized</b>	yes
	<b>Temperature range<sup>6</sup></b>	-30°C up to +60°C
	<b>Power supply</b>	+15 VDC, 19 A 100-240 VAC 50 Hz
	<b>Power consumption</b>	typ. 60 W with one receiver (90 W with second receiver) charged, max. 300 W while charging
	<b>Battery runtime</b>	typical 8 hours at 25°C with one receiver, typical 5 hours at 25°C with two receivers
	<b>Weight<sup>7</sup></b>	system unit: 65.5 kg, antennas: 6.5 kg, covers: 10.5 kg
	<b>Dimensions in mm (W/H/D)</b>	system unit: 600x700x750 mm system unit + covers: 600 x 700 x 900 mm system unit + covers + antennas: 600 x 1300 x 900 mm
	<b>Humidity (non-condensing)</b>	up to 95 %
	<b>Shock/Vibration</b>	40 g shock spectrum / 5 Hz to 150 Hz (sinus), 10 Hz to 500 Hz (random)
	<b>Protection<sup>8</sup></b>	IP 54 to IP 67
	<b>Colour</b>	white
<b>Software</b>	LS OBSERVER RMS (Remote Monitoring Software)	

<sup>1</sup> Higher bandwidth possible as customized upgrade/ with AoA 1xx option in DF mode: 20 MHz max

<sup>2</sup> Including option PDoA

<sup>3</sup> Including option TDoA

<sup>4</sup> Using LS noise reduced raw data material (not IQ data)

<sup>5</sup> Using LS statistical processed raw data

<sup>6</sup> Including option pre-heating or with startup-temperature greater -20°C

<sup>7</sup> Including batteries (dependent on battery type)

<sup>8</sup> IP 54 with ventilated covers (standard), IP 67 for storage with non ventilated covers and option cooling

For further information, please visit our website [www.LStelcom.com](http://www.LStelcom.com) or contact [Info@LStelcom.com](mailto:Info@LStelcom.com).