Lima[®] Cell Monitor



Forensic Analytics are delighted to announce a strategic partnership with Group 2000 and in doing so become UK resellers of LIMA Cell Monitor. Group 2000 create intelligent security solutions for law enforcement, intelligence agencies, telecom providers and internet service providers.

LIMA is a multi-SIM RF survey solution capable of continuously measuring 2G, 3G, 4G, 5G (1 second sample rate). LIMA also passively scans 2.4 & 5.0GHz Wi-Fi SSIDs - all whilst logging GPS position against the radio readings.

LIMA allows locking – via an elegant GUI - to all UK Mobile Network Operators networks, all technologies, all bands (including LTE 800 (B20), 2300 (B40) and 2600 (B7)). E/U/ARFCN locking is also a standard feature.

Dial out function demonstrates connected test calls and a data heartbeat ping test achieves the same result for data connectivity. A frequency sweep on all channels reads information on the active frequencies producing a single pass snapshot of the RF environment in GSM, UMTS and LTE – typically returned within 90 seconds. The survey results are offloaded either by using a mobile data connection on a dedicated modem to a central server or by download from a USB port on the bulkhead for onward mapping and analysis.

LIMA RF survey solution which will start to ship in Q1 2021 comprises:

- 1 x LIMA Cell Monitor box 2G,
 3G, 4G, 5G and Wi-Fi capability
- 13 modems (12 programmable contract SIMs plus 1 Wi-Fi configurable on placing order)
- Maintenance and 24/7 support
- Android tablet with companion app for LIMA interface (Bluetooth connection) plus ruggedised carry case
- External battery pack with 14 hour life and Uninterrupted Power Supply (UPS) feature allowing seamless transition from mains to battery.
- AC power supply unit
- DC 12V in-car power supply unit
- External GPS antenna
- Backpack

Total weight of entire kit 4.7 Kg



Contact our sales team to find out more

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GSM

| Network | ↑ Cell ID | ARFCN | LAC | BSIC | C1 | CBA | Power | Power |
|---------|-----------|-------|-------|------|----|-----|--------|-------|
| 23410 | 39343 | 121 | 21582 | 30 | 20 | 0 | -86.0 | |
| 23410 | 29903 | 105 | 21582 | 74 | 10 | 0 | -96.0 | |
| 23410 | 30973 | 117 | 21582 | 75 | 6 | 0 | -100.0 | |
| 23410 | 20003 | 108 | 21582 | 70 | 5 | 0 | -101.0 | |
| 23410 | 19903 | 119 | 21582 | 76 | 5 | 0 | -101.0 | |
| 23410 | 20264 | 123 | 21582 | 32 | 5 | 0 | -101.0 | |
| 23410 | 12623 | 104 | 21582 | 5 | 4 | 0 | -102.0 | |
| 23410 | 32327 | 116 | 2033 | 45 | 3 | 0 | -103.0 | |
| 23415 | 42376 | 30 | 893 | 5 | 22 | 0 | -83.0 | |
| 23415 | 28732 | 36 | 893 | 61 | 17 | 0 | -88.0 | |
| 23415 | 24172 | 34 | 893 | 61 | 10 | 0 | -95.0 | |
| 23415 | 11773 | 42 | 893 | 56 | 6 | 0 | -99.0 | |
| 23415 | 58870 | 40 | 893 | 11 | 5 | 0 | -100.0 | |
| 23415 | 4837 | 27 | 170 | 62 | 1 | 0 | -104.0 | |
| 23415 | 42372 | 39 | 893 | 55 | 1 | 0 | -104.0 | |
| 23430 | 1648 | 665 | 2529 | 3 | 12 | 0 | -93.0 | |
| 23430 | 55661 | 668 | 2529 | 7 | 6 | 0 | -99.0 | |
| 23430 | 60908 | 652 | 2529 | 37 | 5 | 0 | -100.0 | |
| 23430 | 16641 | 660 | 2529 | 64 | 3 | 0 | -102.0 | |
| 23430 | 21600 | 657 | 2529 | 3 | 2 | 0 | -103.0 | |

UMTS

| Network | Cell ID | UARFCN | LAC | PSC | ECNO | CBA | Power | Power |
|---------|---------|--------|-------|-----|------|-----|--------|-------|
| 23410 | 27781 | 2963 | 21067 | 260 | 16.0 | 0 | -96.0 | |
| 23410 | 22488 | 10637 | 21067 | 465 | 15.0 | 0 | -98.0 | |
| 23410 | 60694 | 10637 | 21067 | 53 | 20.0 | 0 | -101.0 | |
| 23410 | 27718 | 10661 | 21067 | 465 | 19.0 | 0 | -103.0 | |
| 23410 | 62243 | 3050 | 21067 | 390 | 31.0 | 0 | -110.0 | |
| 23415 | 63167 | 2938 | 898 | 457 | 15.0 | 0 | -96.0 | |
| 23415 | 63112 | 10687 | 898 | 139 | 17.0 | 0 | -101.0 | |
| 23415 | 63109 | 10712 | 898 | 139 | 17.0 | 0 | -104.0 | |
| 23415 | 63837 | 10712 | 898 | 60 | 20.0 | 0 | -105.0 | |
| 23420 | 6102 | 10564 | 1200 | 454 | 14.0 | 0 | -97.0 | |
| 23420 | 6106 | 10588 | 1200 | 454 | 20.0 | 0 | -104.0 | |
| 23420 | 6107 | 10612 | 1200 | 454 | 23.0 | 0 | -107.0 | |
| 23430 | 16561 | 10761 | 1105 | 193 | 16.0 | 0 | -104.0 | |

LTE

| Network ^ | Cell ID | EARFCN | TAC | PCI | RSSI | СВА | Power | Power |
|-----------|-----------|--------|-------|-----|------|-----|--------|-------|
| 23410 | 133155462 | 1226 | 496 | 175 | -78 | 0 | -108.0 | |
| 23410 | 131282552 | 6400 | 496 | 416 | -74 | 0 | -110.0 | |
| 23410 | 131282452 | 6300 | 8263 | 416 | -74 | 0 | -112.0 | |
| 23415 | 131282452 | 6300 | 8263 | 416 | -74 | 0 | -112.0 | |
| 23430 | 5008142 | 6225 | 11050 | 216 | -75 | 0 | -104.0 | |
| 23430 | 4520193 | 1617 | 11054 | 85 | -78 | 0 | -108.0 | |

Additional Information

- Accurate and stable onboard GPS fix without the need for external GPS antenna on a foot survey using backpack.
- External GPS antenna (provided) recommended for vehicle mounted surveys.
- EE, O2, Vodafone and Three
- Approximately 3 minutes from powering up to taking readings.
- Built-in protection for power loss, allowing for safe disconnection and simple power down procedure.
- Survey data offload via cellular or Wi-Fi modem to backend of customer's choice at additional cost. (POA)

Technology Locking:

2G (GSM) 900 & 1800MHz 3G (UMTS) 900 & 2100MHz

4G (LTE) - all including 800MHz (B20), 2300MHz (B40) and 2600MHz (B7)

5G (NR) - 3400Mhz - 3600Mhz (N78)

Scan function reveals detail down to BSIC, PSC and PCI level assisting the user to make determinations on co-located cells - as shown above.



