FASTRAK[™] FM-208 FAMILY

Wifi / Bluetooth / Cellular Search, Survey, Geolocation and Collection Systems

TSC's FM-208 family of ruggedized systems (FM-208, FM-208+, FM-208IB, and FM-208BT) provides simultaneous search survey, and geolocation of WiFi and Bluetooth¹ devices as well as collection of WiFi packets. All information is stored in industry standard PCAP-NG format. Designed for low power and high performance, the FM-208 family is an ideal platform for harsh environments and embedded operations.



FM-208

All FM-208 models can operate in Monitor Mode (passive) and Active Mode using the included transmit 802.11 a/b/g/n radio for user controlled active operations

8 independent 802.11 a/b/g/n receivers capable of collecting thousands of packets per second sustained load

Integrated RF distribution unit allows up to 4 antennas to be routed to all 8 receivers

Internal bias-T boards power custom external bi-directional and low noise amplifiers thereby reducing system set-up complexity while providing maximum system flexibility and operational stand-off ranges exceeding 1 mile on the ground

FM-208+

Adds integrated Software Defined Radio (SDR)

Enables Praxis' active stimulation and highprecision geolocation techniques

Sub-20m accuracy with sub-10m accuracy possible from distances exceeding 4 miles

Allows cellular survey and downlink characterization and geolocation

FM-208IB

Adds simultaneous Bluetooth search, survey, and geolocation capability

Provides a single chassis, integrated WiFi/Bluetooth solution

All information associated with detected Bluetooth emitters is stored in the same PCAP-NG file as the WiFi emitter information

Permits multiple techniques for determining, detecting, and locating potential devices of interest

FM-208BT

Combines FM-208+ and FM-208IB capabilities

Incorporates Bluetooth hardware components and SDR

Enables a unique combination of passive and active capabilities in a single chassis against WiFi, Bluetooth, cellular handsets and networks

The supplied FASTRAK User Interface (FLYT) provides real time display of search, survey data along with geolocation position of all surveyed WiFi, Bluetooth and cellular networks. Replay capability allows post mission analysis of all logged data and packets. Advanced integrated analytics, reporting, and "Persons Of Interest" alerting permits the user to quickly identify "items of interest". Export capability of PCAP and other data formats facilitates analysis of stored information with third party tools. Operational profiles allow FM-208 systems to be used for air, land, and sea operations.

¹FM-208 and FM-208+ require External Bluetooth Unit (EBU)



	FM-208	FM-208+	FM-208IB	FM-208BT
Feature			X FARACUS	X \$ 6.00 C C C C C C C C C C C C C C C C C C
Size (WxHxD)	5.75" x 3.05" x 9.5"	5.75" x 3.05" x 9.5"	5.75" x 3.65" x 9.5"	5.75" x 3.65" x 9.5"
Weight	5.75 (lbs)	5.75 (lbs)	6.5 (lbs)	6.5 (lbs)
Input Voltage	9-30V DC	9-30V DC	9-30V DC	9-30V DC
Power ³	20W	21W	25W	25W
Internal Backup Battery	Yes	Yes	Yes	Yes
WiFi Radios (passive)	8 dual band a/b/g/n	8 dual band a/b/g/n	8 dual band a/b/g/n	8 dual band a/b/g/n
WiFi Radio (active)	1 dual band a/b/g/n	1 dual band a/b/g/n	1 dual band a/b/g/n	1 dual band a/b/g/n
Bluetooth Radios (passive)	0	0	8	8
Bluetooth Radio (active)	0	0	1	1
Emitter Search/ Survey/Geolocation (WiFi/Bluetooth)	Yes/Yes ⁴	Yes/Yes ⁴	Yes/Yes	Yes/Yes
Software Defined Radio	no	Yes	no	Yes
High Precision Geolocation Techniques	no/no	Yes/Yes ⁴	no/no	Yes/Yes
Cellular Network Characterization and Geolocation	no/no	Yes/Yes ⁴	no/no	Yes/Yes
Cellular Device IMSI/ MAC Correlation	no/no	Yes/Yes ⁴	no/no	Yes/Yes
Dual Band External Low Noise Amps ⁵	4	4	4	4
Bi-Directional Power Amps/LNAs (WiFi/ Bluetooth)	1/0	2/0	1/1	2/1
Software-controlled internal power for Bi-directional and low noise amplifiers	WiFi Low Noise Amplifiers WiFi Bi-directional Amplifier	 WiFi Low Noise Amplifiers WiFi Bi-directional Amplifier SDR Tx/Rx SDR Rx Only 	WiFi/Bluetooth Low Noise Amplifiers WiFi Bi-directional Amplifier Bluetooth Bi-directional Amplifier	WiFi/Bluetooth Low Noise Amplifiers WiFi Bi-directional Amplifier SDR Tx/Rx SDR Rx Only Bluetooth Bi-directional Amplifier
Front Panel Connections	 1 10/100 Ethernet 2 USB 2.0 4 WiFi RX ports 2 WiFi TX/RX ports 1 Cell modem port 1 GPS antenna port 1 Power connector 1 DVI video port 	 1 10/100 Ethernet 2 USB 2.0 4 WiFi RX ports 1 WiFi TX/RX port 1 SDR Tx/Rx port 1 SDR Rx port 1 GPS antenna port 1 Power connector 1 DVI video port 	 1 10/100 Ethernet 2 USB 2.0 4 WiFi/Bluetooth RX ports 1 WiFi TX/RX port 1 Bluetooth TX/RX port 1 GPS antenna port 1 Power connector 1 DVI video port 	 1 10/100 Ethernet 2 USB 2.0 4 WiFi/Bluetooth RX ports 1 WiFi TX/RX port 1 Bluetooth TX/RX port 1 SDR Tx/Rx port 1 SDR Rx port 1 GPS antenna port 1 Power connector 1 DVI video port

³All Bias-Ts off



⁴With External Bluetooth Unit

⁵18-24 dB of Gain Software Controlled