

## Economy SAM

TX RX Systems Inc – Field Services

Full service Spectrum Analysis and Monitoring (SAM) is a very labor intensive service and as such is sometimes too expensive; putting this valuable service out of reach for smaller projects. TX RX Systems Inc has solved this problem with our Economy Spectrum Analysis and Monitoring. Economy SAM utilizes our proven Advanced Spectrum Logging (ASL) kit, proprietary report processing software and remote engineering support along with your field labor to bring the cost of SAM within the reach of nearly all customers.



### Efficient Use of Field Personnel:

Like our ASL kit, Economy SAM allows the user to monitor multiple sweeps covering almost any frequency span. Using frequency data supplied by the customer, a custom configuration will be created and provided for each application. This allows your field team to make the most efficient use of their time deploying the equipment and gathering the data.

### What We Provide:

TX RX Systems Inc. provides the ASL kit along with a active Verizon air card, for remote connectivity, data collection software and report processing. We can also provide any necessary filters and antennas are available.

When the data collection is complete we will provide a basic Spectrum Analysis and Monitoring report for the site. The basic report contains only the collected data, no analysis or commentary is provided. Analysis and commentary is available at additional cost.

### What You Provide:

The customer provides detailed information regarding the frequencies to be monitored and the expected RF environment. For example, are there transmitters on site in the same band as you wish to monitor, will you be using an existing antenna and filter or do you need us to provide them etc. The customer provides the transportation and field labor to setup the equipment at the site and work with the TX RX Systems engineers remotely to collect the spectrum data.

### Analyzing Data:

When the data collection is complete we will provide a basic Spectrum Analysis and Monitoring report for the site. The basic report contains only the collected data, no analysis or commentary is provided. Analysis and commentary is available at additional cost.

Typically each site is monitored for 24 hours and each report will contain data for the monitoring period. The report will contain a spectrum graph, High level carrier report, Frequency Reports and an Unused Frequency Report.

If analysis and commentary is requested, the report data will be evaluated by a qualified TX RX Systems RF engineer and he will render an opinion regarding the suitability of the site for the proposed system and highlight any observed problems



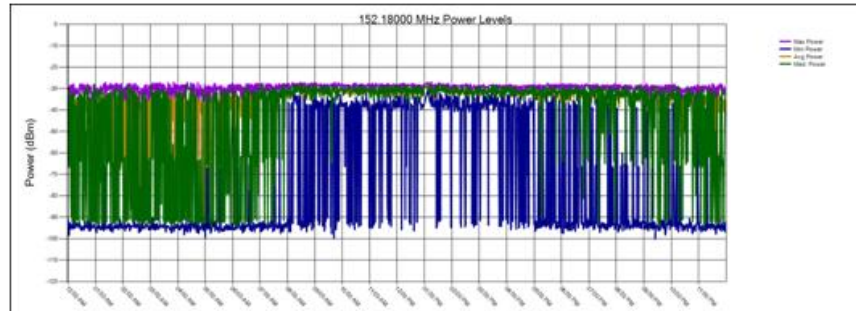
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An Example of some of the data provided in a basic Spectrum Monitoring and Analysis report:

### Spectrum Report:

Displays activity across the monitored spectrum for the entire monitoring period, much like a spectrum analyzer in “Max Hold” mode but with more information.



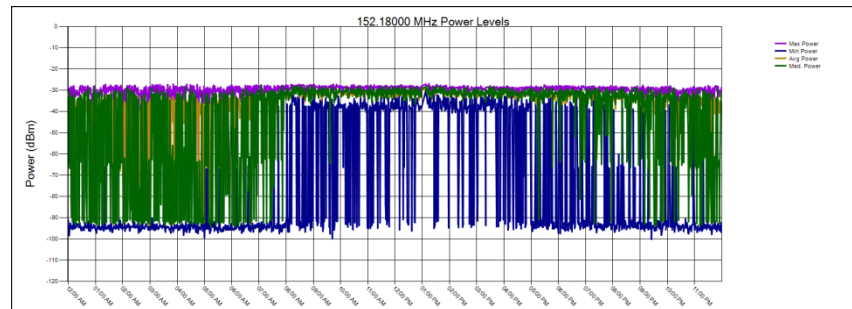
### High Level Carrier Report:

Displays information on frequencies found to have signal levels strong enough to degrade system receiver performance or contribute to receiver intermodulation

Frequency	Max. Power	HLC Avg. Power	Count	Occupancy	MED. Power	FCC Info.
152.18000	-26.87 dBm	-29.19 dBm	1380	80.00%	-32.88 dBm	no license
153.20000	-35.01 dBm	-35.46 dBm	24	1.65%	-40.53 dBm	0.85 Miles
155.17500	-13.65 dBm	-15.16 dBm	6	80.00%	-21.72 dBm	0.83 Miles
157.74000	-33.21 dBm	-34.24 dBm	131	1.65%	-41.44 dBm	0.71 Miles
160.23000	-5.39 dBm	-5.39 dBm	1	80.00%	-13.84 dBm	4.75 Miles
161.52000	-3.03 dBm	-4.21 dBm	22	1.65%	-9.14 dBm	4.75 Miles

### High Level Carrier and Frequency Reports:

Displays the activity level for a single frequency in amplitude vs. time format for the entire monitoring period. Both High Level Carriers and specified receive frequencies will be displayed in this format



### Inactive Frequency Report

#### Inactive Frequency Report:

Lists the frequencies that were observed to have no activity during the monitoring period.

Frequency	MAX Power (dBm)	AVG Power (dBm)	Count	Rating	Frequency	MAX Power (dBm)	AVG Power (dBm)	Count	Rating
150.76750	-90.77	-92.73	0	0	150.77500	-91.58	-92.73	0	0
150.78250	-91.26	-92.74	0	0	150.79000	-91.23	-92.73	0	0
150.79750	-91.49	-92.73	0	0	150.80500	-89.73	-92.73	0	0
150.80750	-87.21	-92.70	0	0	150.81250	-90.78	-92.72	0	0

For additional information on the information provided in the report, feel free to request, a sample report

For a price quotation, or to schedule a project, contact TX RX Systems Inc Field Services or your TX RX Systems Inc representative

**DUPLXERS • CAVITY FILTERS • MULTICOUPLER SYSTEMS • RF SYSTEM PRODUCTS • FIELD SERVICES**

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