NetMAC[™] Carrier Monitoring



The NetMAC[™] Carrier Monitoring Software was designed to make it easy for a user to enter carrier parameters and have the system compute the Power Level, Noise Floor, C/N Ratio, and EIRP (if applicable). It can either loop through all active carriers or continuously scan a selected carrier.

NetMAC™ Carrier Monitoring

	6.8						
CARRIER MONITORING							
Carrier Monitoring Status SUSPEND CM USER DELAY RESUME CM							
Name Number Center Frequency PORT CarrierC 3 1100.0000MHz PORT3							
Alarm Limits							
Current Value Status Low High							
Power (dBm) -11.73 -80.00 10.00							
EIRP (dBW) 0.00 0.00							
CN Ratio 71.70 -900.00							
Noise Floor (dBm) -83.43 -60.00							
FEATURES: • Automated measurement of power, C/N ratio, noise floor and EIRP • Built-in history collection capability • Configured to handle up to 100 carriers							
(can be factory modified to handle even more)							
User definable alarm set points that are color coded for easy visual interpretation							
Low cost alternative							



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	C2] :: C1CarrMon : Carrier Monitor								
	Exit Update Spectrum Analyzer Define Carrier Help								
	Construm Analyzer Complex Information								
- 0	Spectrum Analyzer Scanning Information								
	Automatic Manual Carrier Name: Carrier 1 Restart Spectrum Analyzer							Analyzer	
	Dunani				7		Ston	Spectrum A	nahrzer
	Dynamic Display Carrier: All>							alyzer	
	Number	Name	Center Freq	Power Level	EIRP Level	C/N Ratio	Noise Floor	Scan Date	Scan Time 🔺
1	1	Carrier 1	30.	-29.447	-56.825	27.606	-57.061	10/29/04	18:36:31
2	2	Carrier 2	60.	-29.447	-56.827	27.606	-57.061	10/29/04	18:36:22
3	3	Carrier 3	90.	-29.447	-56.830	27.606	-57.061	10/29/04	18:36:19
4	4	Carrier 4	120.	-29.447	-56.832	27.606	-57.061	10/29/04	18:36:24
5	5	Carrier 5	150.	* -29.447	0.000	27.606	-57.061	10/29/04	18:36:25
6	6	Carrier 6	180.	-29.447	-56.837	27.606	-57.061	10/29/04	18:36:27
7	7	Carrier 7	180.	-29.447	* -56.837	27.606	-57.061	10/29/04	18:36:22
8	8	Carrier 8	150.	0.000	0.000	0.000	0.000		
9	9	Carrier 9	120.	-29.447	-56.832	27.606	-57.061	10/29/04	18:36:28
10	10	Carrier 10	120.	0.000	0.000	0.000	0.000		
11	11	Carrier 11	180.	-29.447	0.000	27.606	-57.061	10/29/04	18:36:20
12	12	Carrier 12	15.	-29.447	0.000	27.606	-57.061	10/29/04	18:36:26
13	13	Carrier 13	90.	-29.447	0.000	27.606	-57.061	10/29/04	18:36:26
14	14	Carrier 14	60.	-29.447	0.000	27.606	-57.061	10/29/04	18:36:23
15	<mark>15</mark>	Carrier 15	196.	0.000	0.000	0.000	0.000		
16	16	Carrier 16	330.	-29.447	0.000	27.606	-57.061	10/29/04	18:36:27
17	17	Carrier 17	230.07	-29.447	-56.842	27.606	-57.061	10/29/04	18:36:29
18	18	Carrier 18	230.012	-29.447	0.000	27.606	-57.061	10/29/04	18:36:21
19	19	Carrier 19	408.012	-29.447	0.000	27.606	-57.061	10/29/04	18:36:24
20	20	Carrier 20	308.012	-29.447	0.000	27.606	-57.061	10/29/04	18:36:21
21	21	Carrier 21	308.012	-29.447	0.000	27.606	-57.061	10/29/04	18:36:29
22	22	Carrier 22	528.012	0.000	0.000	0.000	0.000		
23	23	Carrier 23	617.	* -29.447	0.000	27.606	-57.061	10/29/04	18:36:30
24	24	Carrier 24	618.	* -29.447	0.000	27.606	-57.061	10/29/04	18:36:30 👻
4									•

The carrier records displayed are color-coded; red indicating that an alarm condition exists, yellow if inactive, and black otherwise. If an alarm condition exist for a particular carrier, an asterisk is placed in the table before the value (Power Level, EIRP, C/N Ratio or Noise Floor) that is in the alarm state.

This dialog is set to update every time a carrier's information updates via the system.



NetMAC™ Carrier Monitoring

HZC] ::Decimator	: Define Carrier						×
	E <u>x</u> it	<u>A</u> dd	<u>U</u> pdate	<u>D</u> elete	De <u>f</u> ine Carri	er History		<u>H</u> elp	
Ca	Carrier Information								-
		Number	4			larm Condition Limit	S		
		Number.	7				Low	High	
		Name:	Carrier4		F	Power Level (dBm):	-120.0	10.0	
	S	witch Position:	PORT 4		-	FIDD (dBW/)-	0.0	0.0	
	EIR	RP Calibration:	(none)		-	Eiki (dbw).	1000.0		
	Dog	uirod Desition:	(none)		_ _	Low C/N Ratio:	-1000.0		
	Req	uirea Position.	(none)	_		Noise Floor (dBm):		-60.0	
(Center Free	quency (MHz):	3525.0						
	Reference	e Level (dBm):	-50.0			Attenuation	n (dB): 3	-	
	Frequenc	v Span (MHz)	100.0			Occupied BW	(Hz)· 3000	00	
-		, open (m. 2).	4.0	-		(Res BW for	SED)		
	Marke	er Delta (MHZ):	4.0	_		(,		
•	S	cale Log (dB):	LOG	<u> </u>		Video BV	/ (Hz): 2000	00	
	Numbo	-	Name	Inactivo	Contor From	Deference Level	From Open	Marker Delta	
	Numbe	er Carrier1	Name	Inactive	Center Freq	Reference Level	Freq Span	Marker Delta	a 5
1	Numbe	carrier1	Name	Inactive	Center Freq 2500. 1550.125	Reference Level -50. -45.	Freq Span 100. 100.	Marker Delta 4. 4.	
1	Numbe	carrier1 Carrier2 Carrier3	Name	Inactive	Center Freq 2500. 1550.125 2250.25	Reference Level -50. -45. -47.	Freq Span 100. 100. 50.	Marker Delta 4. 4. 3.5	
1 2 3 4	Numbe 1 2 3 4	carrier1 Carrier2 Carrier3 Carrier4	Name	Inactive	Center Freq 2500. 1550.125 2250.25 3525.	Reference Level -50. -45. -47. -50.	Freq Span 100. 100. 50. 100.	Marker Delta 4. 4. 3.5 4.	
1 2 3 4 5	Number 1 2 3 4	carrier1 Carrier2 Carrier3 Carrier4	Name	Inactive	Center Freq 2500. 1550.125 2250.25 3525.	Reference Level -50. -45. -47. -50.	Freq Span 100. 100. 50. 100.	Marker Delta 4. 3.5 4.	
1 2 3 4 5 6	Numbe 1 2 3 4	carrier1 Carrier2 Carrier3 Carrier4	Name		Center Freq 2500. 1550.125 2250.25 3525.	Reference Level -50. -45. -47. -50.	Freq Span 100. 100. 50. 100.	Marker Delta 4. 3.5 4.	
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1 2 3 4 5 6 7 8 9	Numbe 1 2 3 4 - - - - -	carrier1 Carrier2 Carrier3 Carrier4	Name	Inactive	Center Freq 2500. 1550.125 2250.25 3525.	Reference Level -50. -45. -47. -50.	Freq Span 100. 100. 50. 100.	Marker Delta 4. 3.5 4.	
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1 2 3 4 5 6 7 8 9	Numbe	er Carrier1 Carrier2 Carrier3 Carrier4	Name The Define Ca pecifics of m	arrier dialog ultiple carri	Center Freq 2500. 1550.125 2250.25 3525. gue allows the iers.	Reference Level -50. -45. -47. -50. -50. 	Freq Span 100. 100. 50. 100.	Marker Delta 4. 3.5 4.	
1 2 3 4 5 6 7 8 9	Numbe	er Carrier1 Carrier2 Carrier3 Carrier4	Name The Define Ca pecifics of m The carrier inf Aany carriers	arrier dialog ultiple carrier can be pre	Center Freq 2500. 1550.125 2250.25 3525. gue allows the iers. s stored in the edefined, and	Reference Level -50. -45. -47. -50. -50. 	Freq Span 100. 100. 50. 100.	Marker Delta 4. 4. 3.5 4.	
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1 2 3 4 5 6 7 8 9	Numbe 1 2 3 4 -	er Carrier1 Carrier2 Carrier3 Carrier4	Name The Define Ca pecifics of m The carrier inf Aany carriers utomatically witch positio o the defined	Inactive	Center Freq 2500. 1550.125 2250.25 3525. gue allows the iers. s stored in the edefined, and ugh each, sett manding the s	Reference Level -50. -45. -47. -50. e user to set up t e NetMAC datab the software will ing the appropri spectrum analyze	Freq Span 100. 100. 50. 100.	Marker Delta 4. 4. 3.5 4	





SATCOM & ANTENNA TECHNOLOGIES DIVISION

PARAMETERS	
NUMBER	Designator for reference. 1-100 (Can be factory configured to allow more)
NAME	Descriptive designator for carrier
SWITCH POSITION	Port on matrix or other switch (optional) the signal is routed through
EIRP CALIBRATION	Optional parameter that allows predefined EIRP parameters to be selected on a per antenna basis
REQUIRED POSITION	Selection that limits the scanning of carriers to predefined groups
CENTER FREQUENCY (MHz)	Frequency at which peak of the carrier signal is found
REFERENCE LEVEL (dBm)	Spectrum analyzer display parameter
FREQUENCY SPAN (MHz)	Spectrum analyzer display parameter
MARKER DELTA (MHz)	Center frequency + marker delta is used to compute the noise floor
SCALE LOG (dB)	Choice between linear and logarithmic
ALARM CONDITION LIMITS	User configurable alarm set points for power level, EIRP, low C/N ratio and noise floor
ATTENUATION	Spectrum analyzer display parameter
OCCUPIED BANDWIDTH (Hz)	Spectrum analyzer display parameter
VIDEO BANDWIDTH (Hz)	Spectrum analyzer display parameter

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The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.



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