

70 MHz Plug-in Modules Specifications

70 MHz TRANSMIT CARD SPECIFICATIONS

70 MHz IF Transmit Card	
IF Center Frequency	70 MHz, +/- 18 MHz, Programmable in 500 Hz Steps.
Output Level Range	0 to -25 dBm into 75 ohms (Adjustable in 0.375 dB Steps)
Output Level Stability	+/- 0.50 dB
Phase Noise Outputs	< -90 dBc/Hz > 100 kHz, Per IESS-308
Spurious Outputs	<-40 dBc
TX IF Output	BNC-F, 75 Ohm
TX IF VSWR	1.25:1
Spectral Mask	IESS-308 Compliant
CW Mode Operation	70 +/- 18 MHz, Frequency and Power adjustable in steps of 2.5 kHz and 0.375 dB steps respectively.
Modulation	QPSK
Data Rate	16 kbps to 4096 kbps in 2k steps.
FEC	Selectable: Viterbi R $\frac{1}{2}$, R $\frac{3}{4}$, R $\frac{7}{8}$
Diff Encoding	Selectable: on/off
Spectral Inversion	Selectable: on/off
Scrambling	Selectable: IESS-308 or none
Physical	Occupies 1 slot

70 MHz RECEIVE CARD SPECIFICATIONS

70 MHz IF Receive Card																					
IF Center Frequency	52-88 MHz																				
Input Level Range	-35 to -55 dBm , +30 dBc composite max.																				
RX IF Input	BNC F, 75 Ohm.																				
RX IF VSWR	1.5:1																				
Modulation	QPSK																				
Data Rate	16 kbps to 4096 kbps in 2k steps																				
FEC	Selectable: Viterbi R $\frac{1}{2}$, R $\frac{3}{4}$, R $\frac{7}{8}$																				
Diff Encoding	Selectable: on/off																				
Spectral Inversion	Selectable: on/off																				
Scrambling	Selectable: IESS-308 or none																				
Performance	Eb/No Performance in dB vs BER for Various Coding Rates																				
	<table><thead><tr><th>BER</th><th>Viterbi R$\frac{1}{2}$</th><th>Viterbi R$\frac{3}{4}$</th><th>Viterbi R$\frac{7}{8}$</th></tr></thead><tbody><tr><td>1.00E-09</td><td>7.8</td><td>9.4</td><td>10.3</td></tr><tr><td>1.00E-08</td><td>7.25</td><td>8.75</td><td>9.6</td></tr><tr><td>1.00E-07</td><td>6.65</td><td>8.1</td><td>9.0</td></tr><tr><td>1.00E-06</td><td>6.1</td><td>7.3</td><td>8.4</td></tr></tbody></table>	BER	Viterbi R $\frac{1}{2}$	Viterbi R $\frac{3}{4}$	Viterbi R $\frac{7}{8}$	1.00E-09	7.8	9.4	10.3	1.00E-08	7.25	8.75	9.6	1.00E-07	6.65	8.1	9.0	1.00E-06	6.1	7.3	8.4
BER	Viterbi R $\frac{1}{2}$	Viterbi R $\frac{3}{4}$	Viterbi R $\frac{7}{8}$																		
1.00E-09	7.8	9.4	10.3																		
1.00E-08	7.25	8.75	9.6																		
1.00E-07	6.65	8.1	9.0																		
1.00E-06	6.1	7.3	8.4																		
Acquisition Range	+/-50 kHz with adjustable sweep width																				
Physical	Occupies 1 slot																				

Specifications subject to change without notice. ©Kromos Communications, Inc. All rights reserved.

