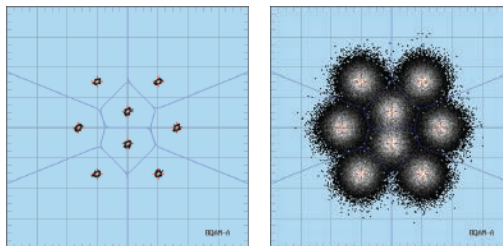


SPECIFICATIONS	
Operating Modes	RX Continuous (SCPC) FlexLDPC, Flexible Blk & Code Rates ACM, AUPC
Center Freq BW	80 MHz per Demod Card (160 MHz Ttl)
Symbol Rate Range	Per Demod: 16 ksp/s to 72 Msps (1 sps steps) Aggregate: 16 ksp/s to 72 Msps (1 sps steps)
Data Rate Range	Per Demod: 16 kbps to 75 Mbps (1 bps steps) Aggregate: 16 kps to 75 Mbps (1 bps steps)
Freq Tuning Range	IF = 50-180 MHz (1 Hz steps) L-band = 950-2250 MHz (1 Hz steps)
Demodulation Types	BPSK, QPSK, 8APSK, 16QAM
FlexLDPC Blk Sizes	FlexLDPC 2k, 4k, 8k, 16k BPSK: 1/2, 8/15, 4/7, 8/13, 2/3, 16/23, 8/11 QPSK: 1/2, 8/15, 4/7, 8/13, 2/3, 16/23, 8/11 16/21, 4/5, 16/19, 8/9 8APSK: 8/13, 2/3, 16/23 16QAM: 1/2, 8/15, 4/7, 8/13, 2/3, 16/23, 8/11 16/21, 4/5, 16/19, 8/9, 16/17
Scram/Descrambler	Sync/Async

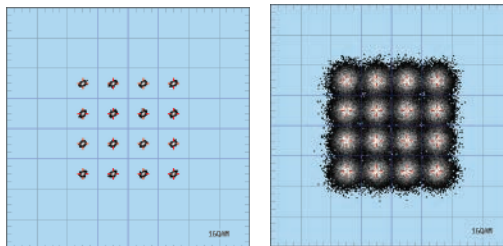
DEMODULATOR (RX CHANNELS)

Input Bandwidth	80 MHz (per Demod Card) IF Carrier Range: 50 to 180 MHz IF Center Freq: 86 to 164 MHz L-Band Carrier Range: 950 to 2250 MHz L-Band Center Freq: 986 to 2214 MHz
Recieve Carriers	Up to 32 per 1/2 RU
Input Acquisition Range	±100 Hz to ±3 MHz, 1 Hz Steps
Minimum Input Level	10 x Log(SR) - 125 = Lvl (dBm)
Maximum Input Level	10 x Log(SR) - 80 = Lvl (dBm)
Max IF Input Power Density	+20 dBc/Hz
Maximum Total Power	+10 dBm
Receive Acquisition Time	Typical 500 ms at 64 kbps, QPSK
Input Impedance	IF and L-Band, 50 Ohms SMA (f)
Input Return Loss	IF or L-Band > 16dB
Input Phase Noise	> Intelsat by 6 dB typical, 4 dB min
Demod Roll-Off Factor %	5, 10, 15, 20, 25, 30, 35 (%)

M7D Constellation monitor with and without noise



8APSK



TYPICAL ES/NO QEF (NON INCLUSIVE)

FlexLDPC™	BPSK/QPSK (dB)	8APSK (dB)	16QAM (dB)
LDPC-1/2-2k	2.04	-	4.48
LDPC-1/2-16k	1.38	-	3.76
LDPC-2/3-2k	2.77	4.68	5.85
LDPC-2/3-16k	2.09	3.91	5.01
LDPC-16/23-2k	3.15	5.10	-
LDPC-16/23-16k	2.41	4.27	-
LDPC-8/11-2k	3.52	-	-
LDPC-8/11-16k	2.72	-	-
LDPC-4/5-2k	-	-	7.66
LDPC-4/5-16k	-	-	6.68
LDPC-8/9-2k	5.63	-	9.37
LDPC-8/9-16k	4.40	-	7.95
LDPC-16/17-2k	-	-	10.14
LDPC-16/17-16k	-	-	8.63

NETWORK ETHERNET INTERFACE (N7)	
Network Ethernet Ports	5Ports (RJ-45), 1 Port SFP
4 Port Interface	10/100 BaseT, Gig Ethernet (RJ-45)
SFP Port	Optional Gigabit or Optic Fiber
Ethernet Protocol	Layer 2 Switched Bridge Only
Features	QoS and VLAN Selectable

MONITOR AND CONTROL

Remote Control Interfaces	RS-232, RS-485, SNMP, Web Browser
Alarm Outputs	Qty 2 Form C

ENVIRONMENTAL AND PHYSICAL

AC to DC Adapter (Std)	Input 100-240 VAC, Output 24 V 65 W max
DC Input (Rear of Unit)	8 to 36 VDC, -48 VDC Optional
Operating Temperature Range	0°C to 50°C, 99% humidity, non-con
Storage Temperature	-20°C to +70°C, 99% humidity, non-con
Size	8.5" (W) x 11" (D) x 1.75" (H), (2 Units in 1 RU)
Weight	< 5 lbs, fully configured

CERTIFICATION AND COMPLIANCE

CE Certified for:	ETSI EN 301 489-1 V1.9.2 EN50022 Emissions EN50024 Immunity EN60950 (Safety)
RoHS	Meets RoHS lead-free standards

* Specifications subject to change without notice

OTHER M7 ELEMENTS PRODUCTS



M7 Modulator



M7LT Remote Modem



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