

SPECIFICATIONS

Frequency Specifications

	<i>Value</i>	<i>Units</i>
Frequency range	20-160	MHz
Frequency resolution (1)	0.1	Hz
Frequency stability	±2	ppm/deg C
Frequency preload time (2)	<8	µs
Frequency toggle time (3)	<80	ns

Amplitude Specifications

RF output power, nominal for all channels on	3.2	Watt
RF output power, per channel	0.4	Watt
Modulation bandwidth (4)	>2	MHz
Dynamic range (5)	>35	dBc
Intermodulation (6)	>41	dB
Spurious	>45	dBc
Signal to noise ratio (7)	>75	dB

Interfaces

RF output impedance	50	Ohms
Amplitude modulation input level	0-10	Volts
FSK modulation input level	3.3	Volts
Blanking input	3.3	Volts
Digital controls	ASC II	
Sensor input	±3.3	Volts
Power input, from DC supply	24@2A	Volts

General Features

8 channels, combined as composite output.
 On-board composite output power measurement.
 Independent linear amplitude modulation on each channel.
 Common blanking signal for all channels.
 Independent frequency shift modulation on each channel.
 Robust command set.
 Built in Network Protocols (i.e. Point to Point Protocol PPP, Link Control Protocol LCP, Password Authentication Protocol PAP, Internet Control Message Protocol, etc.)
 Control Voltage Levels: RS232.

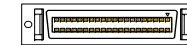
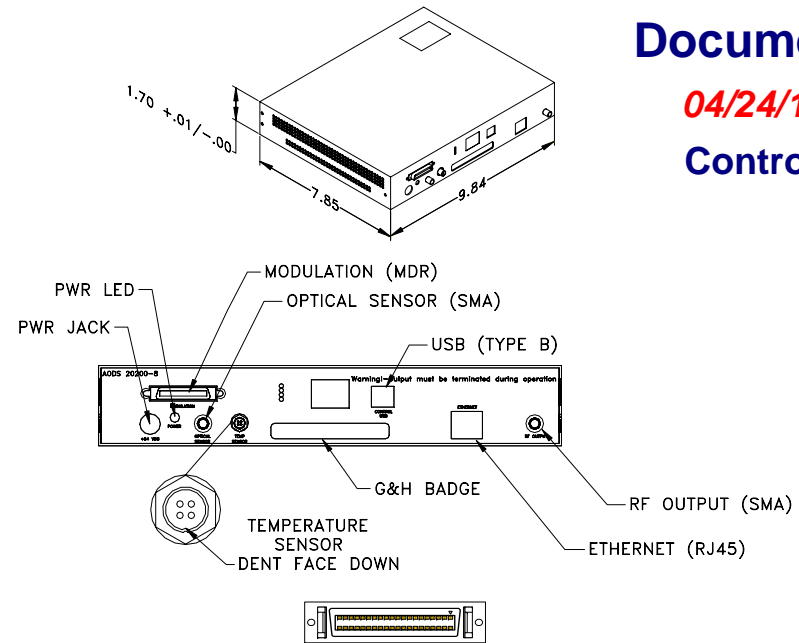
Comments:

1. Actually 0.0931 Hz, closest approximation to set frequency will be chosen.
2. Typically 1-8 µs, each frequency requires 32 bits, plus a starting RAM address.
3. Direct switch mode to one of three preset frequency.
4. Measured at -3 dB point, DC coupled.
5. 20-160 MHz.
6. 2 tone test, 100 MHz + 105 MHz, each of 125 mW output
7. 1 MHz measurement bandwidth, 125 mW reference tone.
8. Reference Outline Drawing 97-03926-12-15.

Code: 160T2-8SAR-24-3.2B

OUTLINE DRAWING

Document
04/24/13
Control



MDR connector

Modulation and FSK/Blank Connector Pin out

Pin	Function	Direction	Description	Pin	Function	Direction
1	VCC24	-	-	21	VCC24	-
2	VCC24	-	-	22	GND	-
3	GRD	-	-	23	FSK0	-
4	GND	-	-	24	FSK1	-
5	GND	-	-	25	FSK2	-
6	GND	-	-	26	FSK3	-
7	GND	-	-	27	FSK4	-
8	GND	-	-	28	FSK5	-
9	GND	-	-	29	FSK6	-
10	GND	-	-	30	FSK7	-
11	GND	-	-	31	BLANK	-
12	GND	-	-	32	GRD	-
13	MOD 0	-	-	33	MOD 0+	-
14	MOD 1-	-	-	34	MOD 1+	-
15	MOD 2-	-	-	35	MOD 2+	-
16	MOD 3-	-	-	36	MOD 3+	-
17	MOD 4-	-	-	37	MOD 4+	-
18	MOD 5-	-	-	38	MOD 5+	-
19	MOD 6-	-	-	39	MOD 6+	-
20	MOD 7-	-	-	40	MOD 7+	-

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TOLERANCES: .XX ± .01 .XXX ± .005	DR	M.Phung 4/17/2013		
MATERIAL:	CHK			
FINISH:	APP		PART NUMBER:	REV:
	APP		97-03926-12	A
			SHEET	1 OF 1