

SPECIFICATIONS

OUTLINE DRAWING

Document

04/24/13

Control

Frequency Specifications

	Value	Units
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

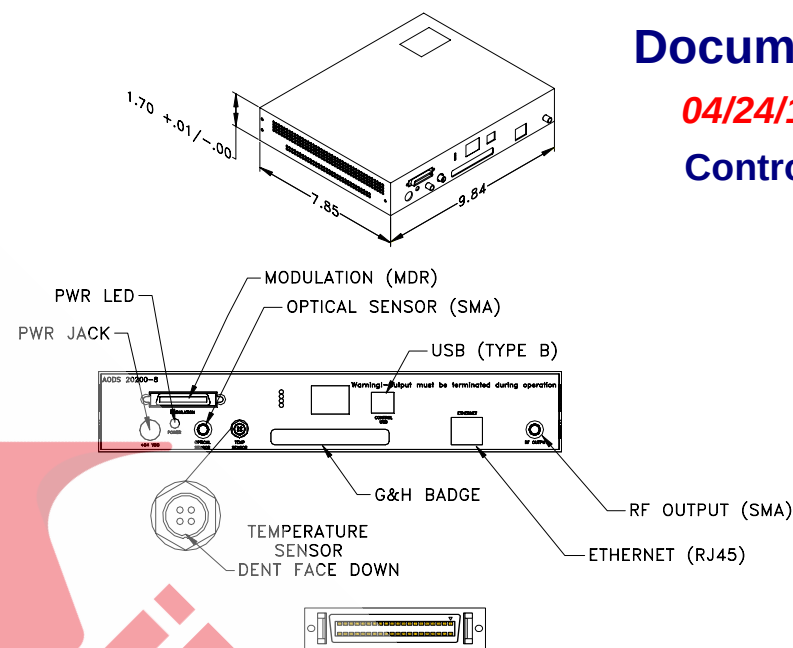
General Features

- 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



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	 AODS Synth DDS 8 CH G&H ANALOG PLL=400MHZ	
MATERIAL:	CHK			
FINISH:	APP			
	APP		PART NUMBER:	REV:
			97-03926-12	A
			SHEET 1 OF 1	