

REV	DATE	REVISION RECORD	DWN	AUTH
-	07-14-17	Initial Release	PAC	

**OUTPUTS**

No. of Outputs	Frequency	Level (into 50Ω)
1	4.0 GHz	+13 ±2 dBm
1	8.0 GHz	+13 ±2 dBm
1	12.0 GHz	+13 ±2 dBm

**STABILITY**

**Aging**  
 5 x 10<sup>-7</sup> per year  
 after 30 days operating, typical

**Warm-up Time**

1 hour, maximum; 15 minutes, typical (@ +25°C)

**Phase Noise L(f), dBc/Hz**

	4 GHz	8 GHz	12 GHz
10 Hz	-74	-69	-67
100 Hz	-105	-101	-97
1 kHz	-130	-122	-118
10 kHz	-145	-137	-133
100 kHz	-146	-139	-135
1 MHz	-146	-140	-136
10 MHz	-146	-140	-136

**Harmonics**

≤ -25 dBc

**Sub-Harmonics**

≤ -60 dBc

**Spurious**

≤ -80 dBc, excluding power supply line related spurs

**CRYSTAL**

**Type**

100 MHz SC-cut

**MIXER**

Marki M2B-0218

**ENVIRONMENT**

**Operating Temperature**

Lab Environment, +15°C to +35°C

**Storage Temperature**

-20°C to +70°C

**ADJUSTMENT**

**Electrical Tuning Input**

±3 PPM minimum, 0 to +10 Volts

**POWER REQUIREMENTS**

**External AC/DC Power Adapter Provided**

AC Input to Adapter: 100 to 240 VAC, 50/60 Hz

3 pole AC inlet IEC320-C14

DC Output from Adapter: +18 VDC

DC Maximum Load: 3.33 Amp, max

CE/UL Certified

DC Power Cord (6 ft.)

AC Power Cord (6 ft.)

**Supply Voltage to Rear of Chassis**

+18 VDC ±3%

(Internally filtered and regulated)

**Current Draw**

3 Amps, max

**MECHANICAL**

**Dimensions**

Wenzel G300-F L021716091,

Protocase L021716091-47491-1

8 x 12 x 1.72"

**Connectors**

RF Outputs: SMA(f), front panel

Mixer Inputs/Output: SMA(f), front panel

Electrical Tuning: BNC(f), front panel

DC Supply: Center Positive Barrel Connector, rear panel – J1

**Front Panel**

Painted Black with White Lettering

**Monitoring**

LED provided on front panel for:

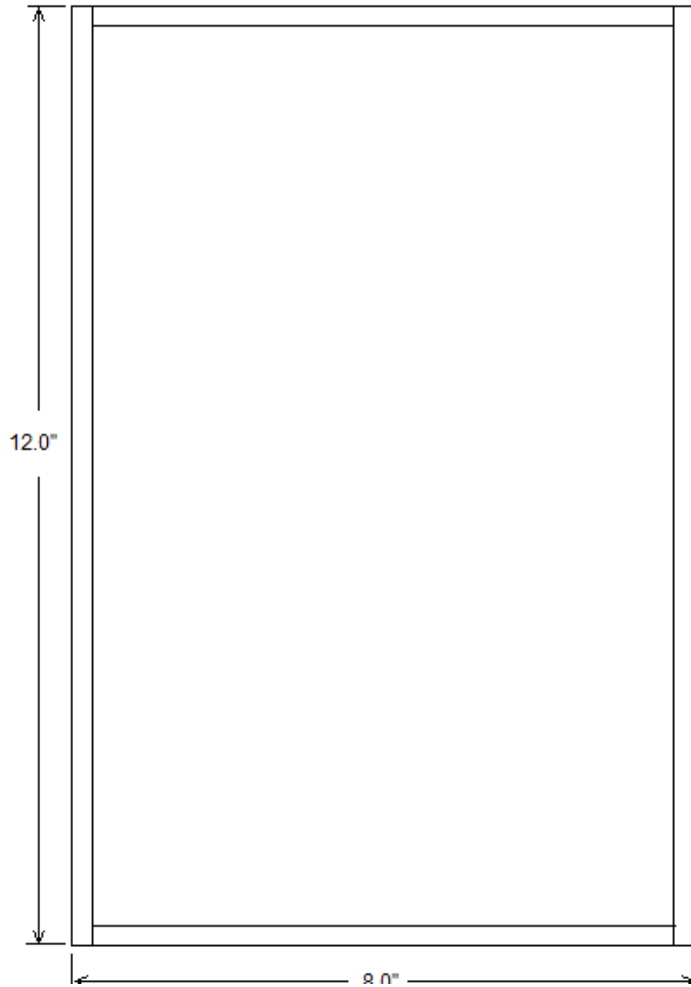
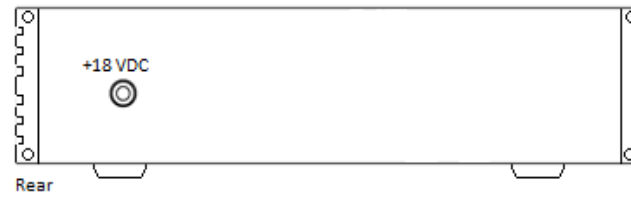
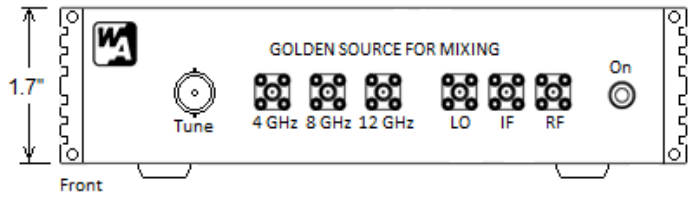
- POWER (DC Input Power – Green = ON)

**OTHER**

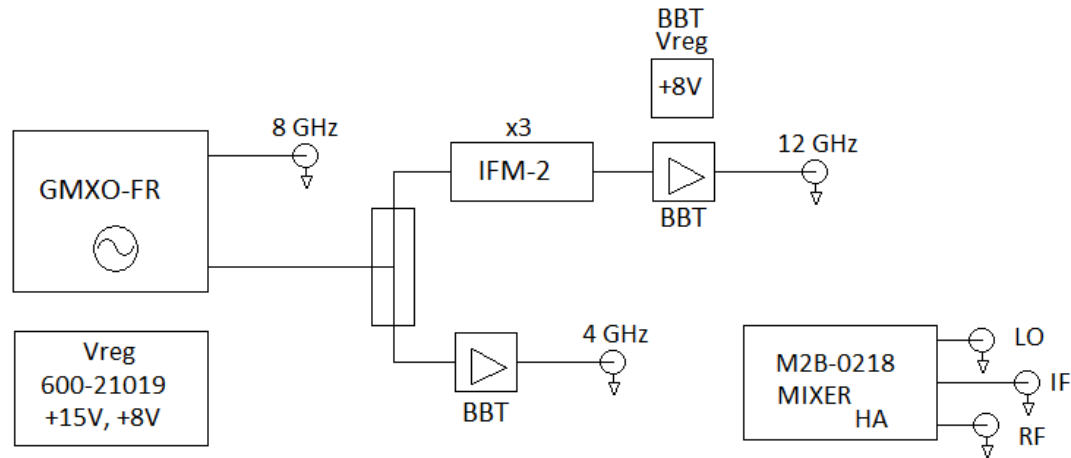
**Test Data**

Output Levels, Phase Noise, Harmonics, Subs, Spurious

<b>Wenzel Associates, Inc.</b>				
Austin, Texas				
Title: <b>4 GHz, 8 GHz and 12 GHz Golden Frequency Source for Mixing</b>				
P/N: <b>501-31058</b>	Rev: -	Date: <b>07-14-17</b>	Drawn:	Ref: 29762c
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>	Page 1 of 3



<b>Wenzel Associates, Inc.</b> Austin, Texas				
Title: <b>4 GHz, 8 GHz and 12 GHz Golden Frequency Source for Mixing</b>				
P/N: <b>501-31058</b>	Rev: -	Date: <b>07-14-17</b>	Drawn:	Ref: 29762c
Tolerances: (except as noted) Dimensions are in inches	0.XX Dec: <b>±0.030"</b>	0.XXX Dec: <b>±0.010"</b>	FSCM: <b>62821</b>	Page <b>2</b> of <b>3</b>



4 GHz				8 GHz				12 GHz			
Source	Input	Sum	Diff	Source	Input	Sum	Diff	Source	Input	Sum	Diff
4	7	11	3	8	7	15	1	12	7	19	5
4	8	12	4	8	8	16	0	12	8	20	4
4	9	13	5	8	9	17	1	12	9	21	3
4	10	14	6	8	10	18	2	12	10	22	2
4	11	15	7	8	11	19	3	12	11	23	1
4	12	16	8	8	12	20	4	12	12	24	0
4	13	17	9	8	13	21	5	12	13	25	1
4	14	18	10	8	14	22	6	12	14	26	2
4	15	19	11	8	15	23	7	12	15	27	3
4	16	20	12	8	16	24	8	12	16	28	4
4	17	21	13	8	17	25	9	12	17	29	5
4	18	22	14	8	18	26	10	12	18	30	6

## Wenzel Associates, Inc.

Austin, Texas

Title:

### 4 GHz, 8 GHz and 12 GHz Golden Frequency Source for Mixing

P/N:

**501-31058**

Rev:

-

Date:

**07-14-17**

Drawn:

Ref:

29762c

Tolerances:  
(except as noted)  
Dimensions are in inches

0.XX Dec:

**±0.030"**

0.XXX Dec:

**±0.010"**

FSCM:

**62821**

Page **3** of **3**