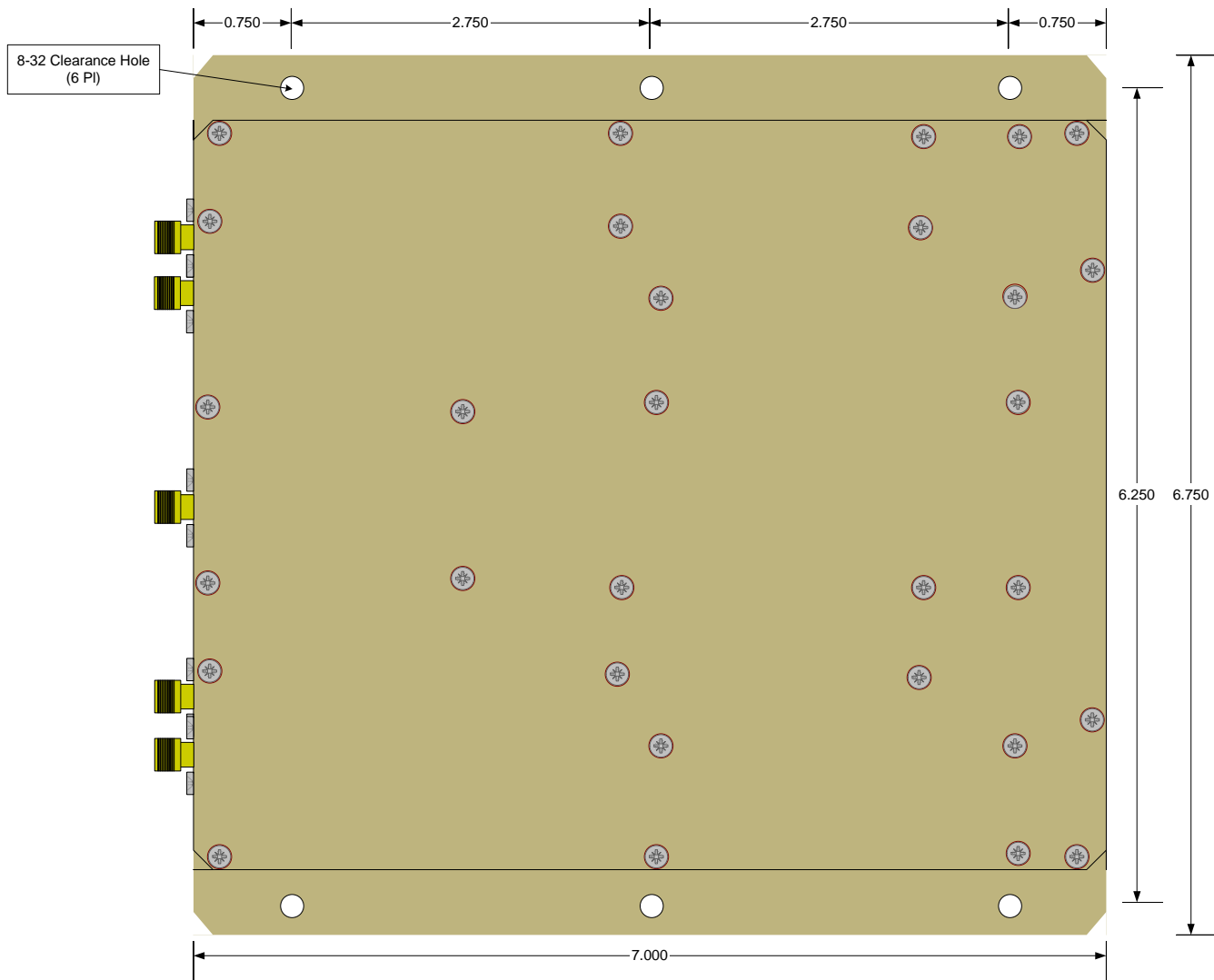


Top View



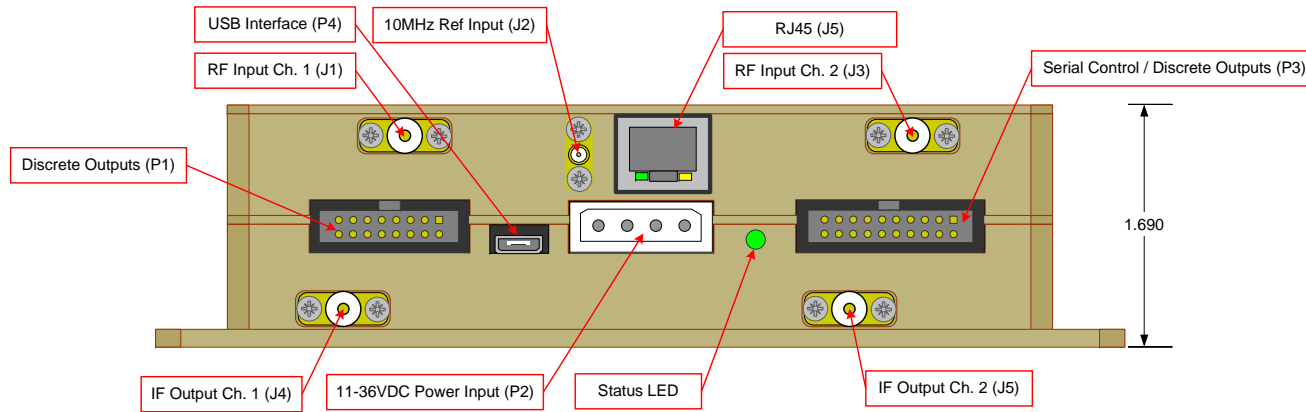
Notes:

- 1.) All dimensions shown are in inches.
- 2.) Tolerances are +/- 0.005 inches.

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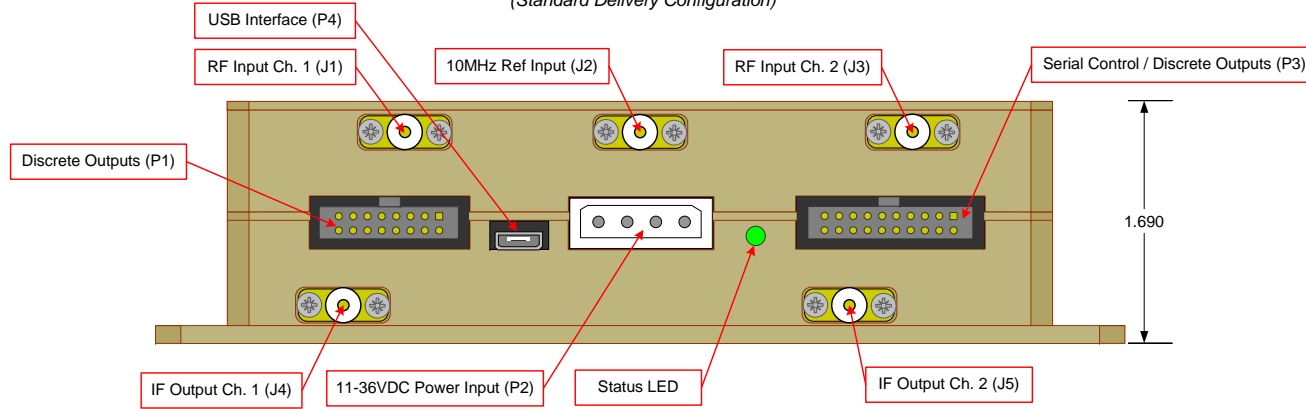
Front View

(Optional Ethernet Configuration)



Front View

(Standard Delivery Configuration)

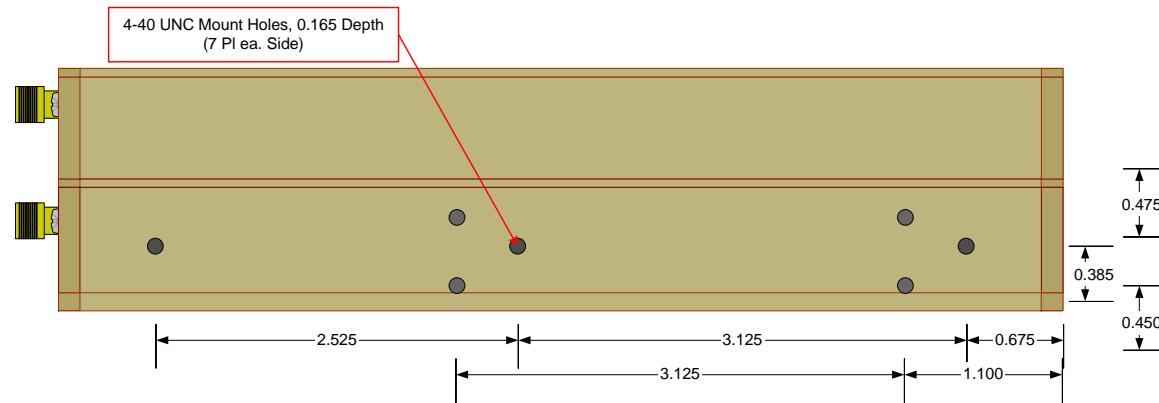


Notes:

- 1.) All dimensions shown are in inches.
- 2.) Tolerances are +/- 0.005 inches.

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Side View

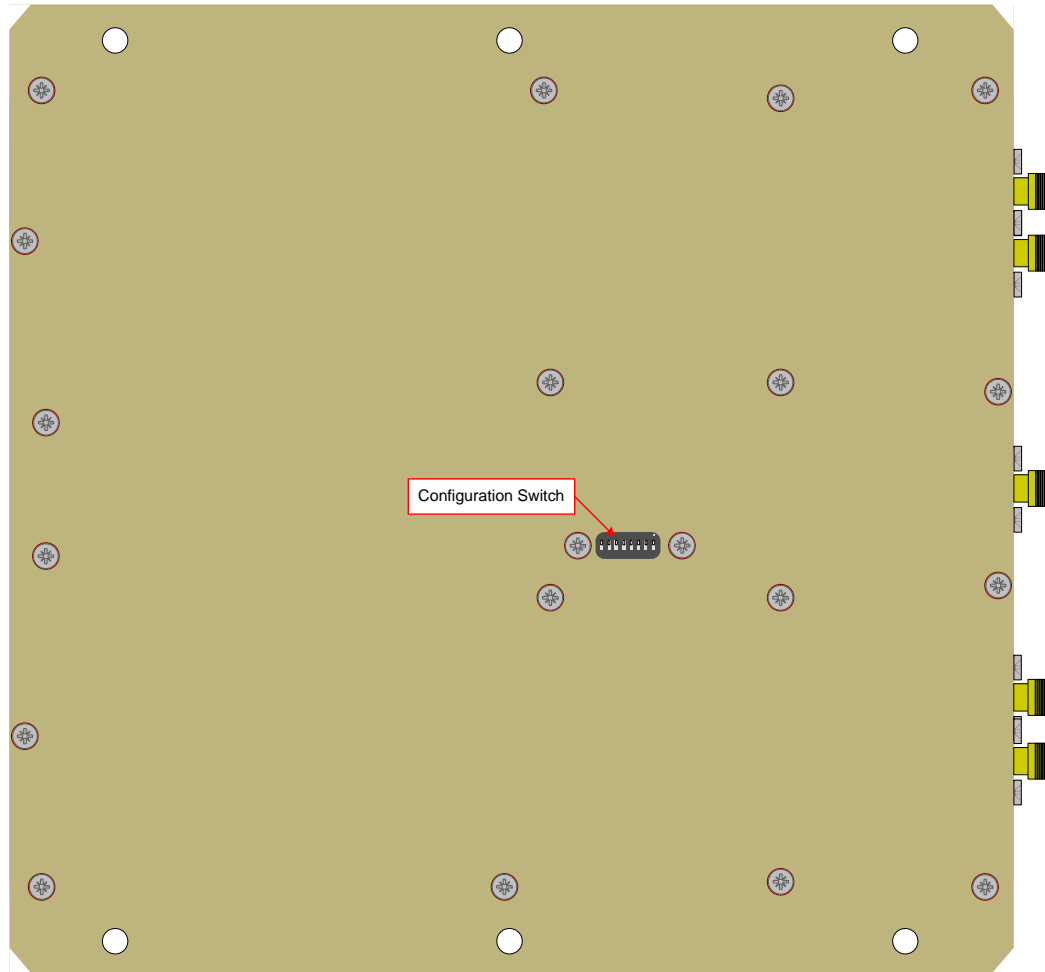


Notes:

- 1.) All dimensions shown are in inches.
- 2.) Tolerances are +/- 0.005 inches.

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Bottom View



Notes:

- 1.) All dimensions shown are in inches.
- 2.) Tolerances are +/- 0.005 inches.

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Table 1. J1 Connector	
RF Signal Input Ch. 1	SMA Female

Table 2. J2 Connector	
10MHz Reference Input (for Ethernet option)	SMA Female SMB Male

Table 3. J3 Connector	
RF Signal Input Ch. 2	SMA Female

Table 4. J4 Connector	
IF Signal Output Ch. 1	SMA Female

Table 5. J5 Connector	
IF Signal Output Ch. 2	SMA Female

Table 6. P1 Connector Tyco PN:5103310-3	
Pin 1	Ch. 1 AGC Output
Pin 2	Ground
Pin 3	Ch. 1 AM Output
Pin 4	Ground
Pin 5	Ch. 1 PCM Output #1
Pin 6	Ground
Pin 7	Ch. 1 Optional Bias-T Vin
Pin 8	Ground
Pin 9	Ch. 2 AGC Output
Pin 10	Ground
Pin 11	Ch. 2 AM Output
Pin 12	Ground
Pin 13	Ch. 2 PCM Output #1
Pin 14	Ground
Pin 15	Ch. 2 Optional Bias-T Vin
Pin 16	Ground

Table 7. P2 Connector Molex PN:53109-0410	
Pin 1	+11-36VDC Power
Pin 2	Power Return
Pin 3	Power Return
Pin 4	(Unused)

Table 9. P4 Connector USB Micro-B (Female) FCI PN: 10103594	
Pin 1	(Unused)
Pin 2	Data -
Pin 3	Data +
Pin 4	(Unused)
Pin 5	Ground

Receiver Specifications/Notes:

- RF Input (Up to 3 for each Receiver plus 70MHz): P, Lower L, Upper L, S-Band, NATO-E band, C1, C2 and C3 ; custom
- RF Tuning Step: 500 kHz (typ.) 50 kHz steps (min.)
- Maximum RF Input Signal without damage: +30 dBm
- RF Input P1dB: +10 dBm
- RF Input Dynamic Range: 110dB (nom.) 120dB (max.)
- Receiver AGC range: +10 to -100dBm (nom.); +10 to -110dBm (max)
- VSWR: 1.5:1 typical
- Frequency Accuracy: 0.002 ppm
- Noise Figure: 8dB max.; 5 dB typ.
- RF Input Impedance: 50 ohms
- IF Output Frequency: 70MHz
- Receiver Data Outputs (PCM1/PCM2): 4Vp-p (unloaded); Adjustable
- Receiver Data Output Impedance: 75 ohms
- Optional FM Demodulator bandwidth: 12MHz (max.) [20Mbps NRZL data]
- DC Input Power: 11-36VDC; 22W (typ.) 26W (max.)
- Discrete Inputs/Outputs: 5V TTL Logic Levels
- IF Filters (3dB BW): Up to 8 Bandwidths; Std = 250K, 500K, 1M, 2M, 5M, 10M, 20M, 40M; Custom
- Optional Post Detect Filters (3dB BW): Up to 8 Bandwidths; Std = 125K, 250K, 500K, 1M, 2.5M, 4.6M, 10M, 20M; Custom
- AM Output: 2Vp-p @ 50% AM Index; User Adjustable; 75 ohms
- AM 3dB LPF Output Filters: 32 User selectable; Ranges from 50Hz to 50kHz
- AGC Output: Std = 0 to +4V; Twelve User selectable slopes and ranges using Serial Channel A Interface
- Control Interface (See notes below): All serial channels RS232; Factory default to 57.6K BAUD in 8-N-1 format
- Bias-T Input (Optional): Voltage applied to both input bias T's. Limited to 25VDC@500mA per channel.

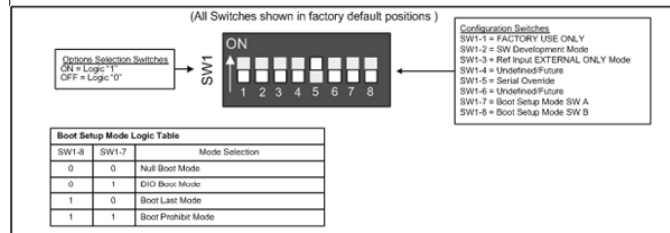
Control Interface Notes:

- Serial controls, although simultaneously operational at all times, should be utilized one at a time to minimize user confusion. The last valid setting sent by an interface is utilized as a the present setup.
- The RS232 serial channel located on connector P3, is considered the failsafe and thus primary interface connection.
- Standard interface is 57.6K BAUD, 8-N-1, format; Serial rates are user selectable and can vary between 9.6K and 115.2K BAUD.
- See Figure 1 for configuration switch settings.
- USB interface is USB 2.0 version.
- The optional Ethernet interface (P5) controls are based on the same protocol and packet format as those of the USB and serial interfaces.
- Ethernet interface is standard RJ45 pinout and 10/100 format.

Table 8. P3 Connector Tyco PN:5103310-5

Pin 1	SERIAL RDXA
Pin 2	SERIAL TXDA
Pin 3	SERIAL RTNA
Pin 4	RFSWA
Pin 5	+5VDC
Pin 6	RFSWB
Pin 7	DIO1
Pin 8	DIO2
Pin 9	DIO3
Pin 10	DIO4
Pin 11	-----
Pin 12	DIO RTN
Pin 13	-----
Pin 14	-----
Pin 15	GND
Pin 16	-----
Pin 17	-----
Pin 18	-----
Pin 19	GND
Pin 20	-----

Figure 1. Configuration Switch



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