

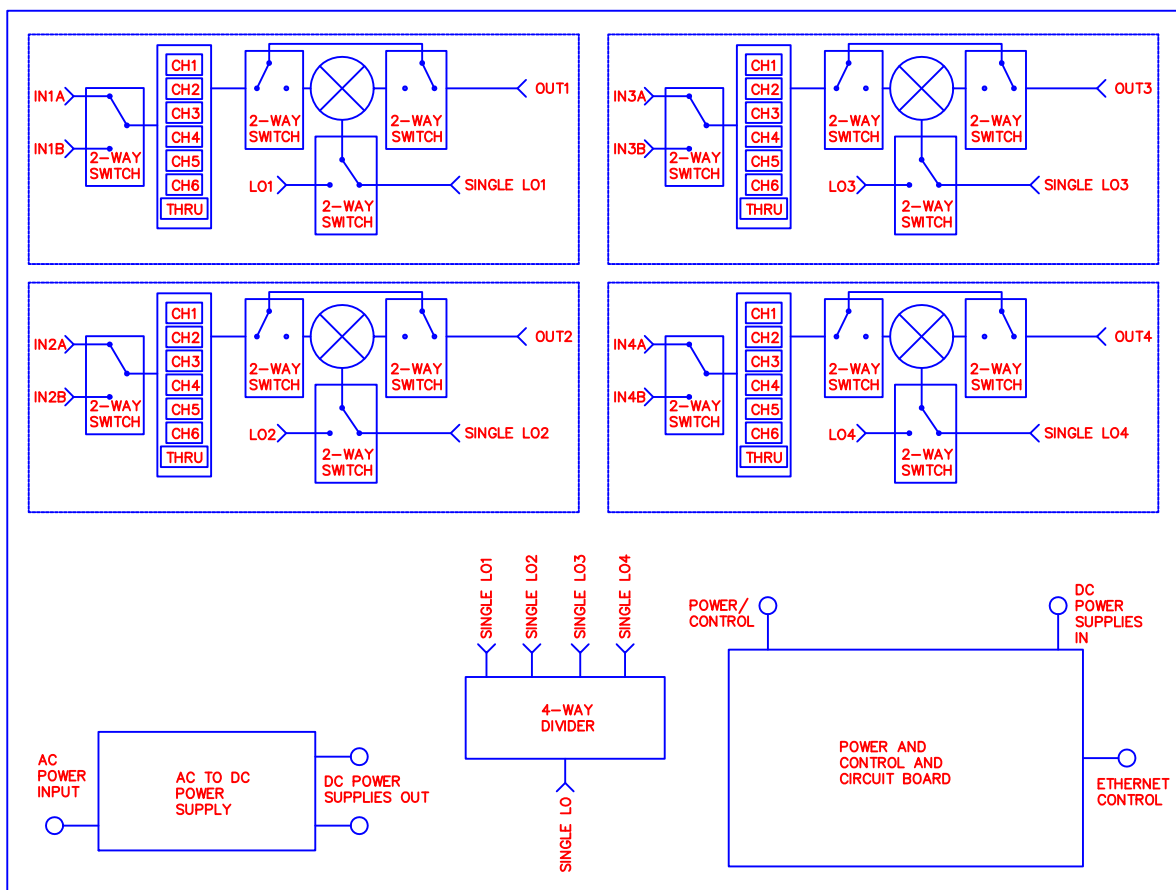
DESCRIPTION:

PMI MODEL NUMBER PDC-70M40G-QUAD-ENET-1U-292FF CONTAINS FOUR FREQUENCY DOWN CONVERTERS CONSISTING OF DUAL INPUTS WITH 7-WAY SWITCHED FILTER BANKS AND THE ABILITY FOR 4 SEPARATE LOCAL OSCILLATORS OR A SINGLE SHARED LOCAL OSCILLATOR. THE 7-WAY SWITCHED FILTER BANK INCLUDES SIX 4 GHz WIDE FILTER PATHS AND A 70 MHz TO 40 GHz THRU CHANNEL WITH SWITCHING SPEEDS OF 100 ns. THE CHANNELS CAN BE SELECTED THROUGH AN ETHERNET CONNECTION AND THE IP ADDRESS CAN BE CHANGED USING A USB INTERFACE. THE ETHERNET CONNECTION ALSO ALLOWS FOR COMMAND ACKNOWLEDGEMENTS TO BE RETURNED TO THE USER AS WELL AS SWITCH POSITIONS. THE DEFAULT SWITCH POSITIONS ON POWER-ON IS TO HAVE ALL FILTER BANKS IN THE THRU CHANNEL POSITIONS, INPUTS SET AT "A" POSITIONS AND A SINGLE LOCAL OSCILLATOR.

SPECIFICATIONS:

- **INPUTS:** IN1 - IN4
 FREQUENCY: 70 MHz TO 40 GHz
 ABSOLUTE MAX POWER LEVEL: +20 dBm
 CONNECTORS: 2.92 mm (F)
- **LOCAL OSCILLATORS:** SINGLE LO
 FREQUENCY: 2 GHz - 40 GHz
 POWER LEVEL: +25 TO +30 dBm
 CONNECTORS: 2.92 mm (F)
- **LOCAL OSCILLATORS:** LO1 - LO4
 FREQUENCY: 2 GHz - 40 GHz
 POWER LEVEL: +17 TO +22 dBm
 CONNECTORS: 2.92 mm (F)
- **OUTPUTS:** OUT1 - OUT4
 FREQUENCY: 70 MHz - 4 GHz
 INSERTION LOSS: TBD
 CONNECTORS: SMA (F)
- **DIGITAL CONTROL:** ETHERNET CONTROL
 STATIC IP ADDRESS SET AT FACTORY
 IP ADDRESS CONFIGURABLE THROUGH USB INTERFACE
 COMMAND STRUCTURE TBD
 COMMAND ACKNOWLEDGEMENTS WILL BE SENT
 STATUS TO INCLUDE SWITCH POSITIONS AND TEMPERATURE
- **POWER SUPPLY:** 120VAC, 50/60 Hz
 6 FOOT POWER CORD INCLUDED
 FUSE PROTECTION INCLUDED
- **SIZE:** 1U 19" RACKMOUNT CHASSIS, DEPTH TBD
- **FINISH:** POWDER COATED BLUE

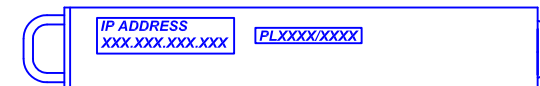
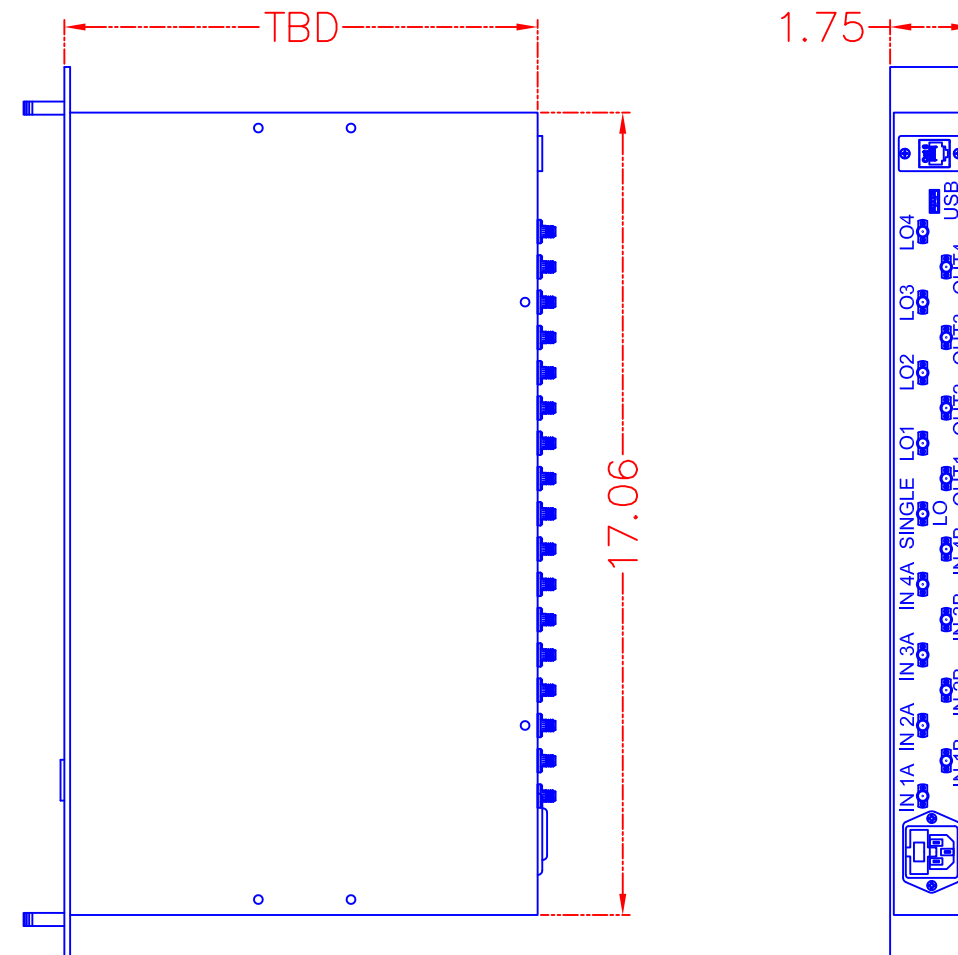
BLOCK DIAGRAM:



- **CHANNEL 1:**
 FREQUENCY (1dB): 4 GHz - 8 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 3 GHz
 ≥60 dB @ 9 GHz - 40 GHz
- **CHANNEL 2:**
 FREQUENCY (1dB): 8 GHz - 12 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 7 GHz
 ≥60 dB @ 13 GHz - 40 GHz
- **CHANNEL 3:**
 FREQUENCY (1dB): 12 GHz - 16 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 11 GHz
 ≥60 dB @ 17 GHz - 40 GHz
- **CHANNEL 4:**
 FREQUENCY (1dB): 16 GHz - 20 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 15 GHz
 ≥60 dB @ 21 GHz - 40 GHz
- **CHANNEL 5:**
 FREQUENCY (1dB): 32 GHz - 36 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 31 GHz
 ≥60 dB @ 37 GHz - 40 GHz
- **CHANNEL 6:**
 FREQUENCY (1dB): 36 GHz - 40 GHz
 VSWR: ≤2.0 : 1 @ Passband
 REJECTION: ≥60 dB @ DC - 35 GHz
 ≥60 dB @ 41 GHz - 50 GHz
- **THRU CHANNEL:**
 FREQUENCY: 70 MHz - 40 GHz
 VSWR: ≤2.0 : 1 @ Passband

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	1	PRELIMINARY	2/10/15	
	2	UPDATED	2/27/15	



PMI CONFIDENTIAL AND PROPRIETARY

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APPROVALS		DATE	TITLE		
DRAWN <i>DPD</i>		2/10/15	PRODUCT FEATURE		
CHECKED			PDC-70M40G-QUAD-ENET-1U-292FF		
ISSUED	SIZE	FSCM NO.	DWG NO.	REV.	
	B	05XQ0		2	
SCALE N:S			PRELIMINARY	SHEET 1 OF 1	

ALL DIMENSIONS ARE IN INCHES
 TOLERANCES:
 X.XX ±0.020
 X.XXX ±0.010