

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:

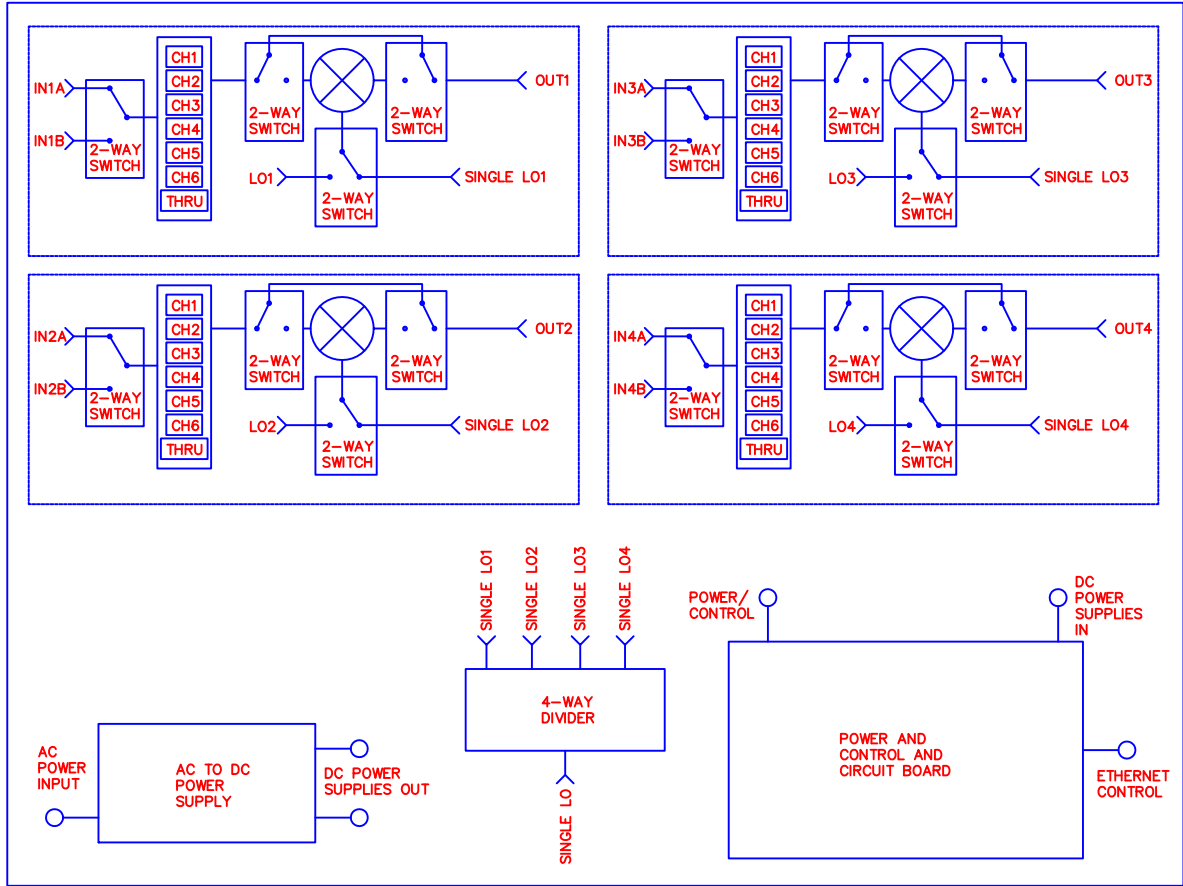
- INPUTS: IN1 - IN4
 - FREQUENCY: 70 MHz TO 40 GHz
 - ABSOLUTE MAX POWER LEVEL: +20 dBm
 - CONNECTORS: 2.92 mm (F)

- 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

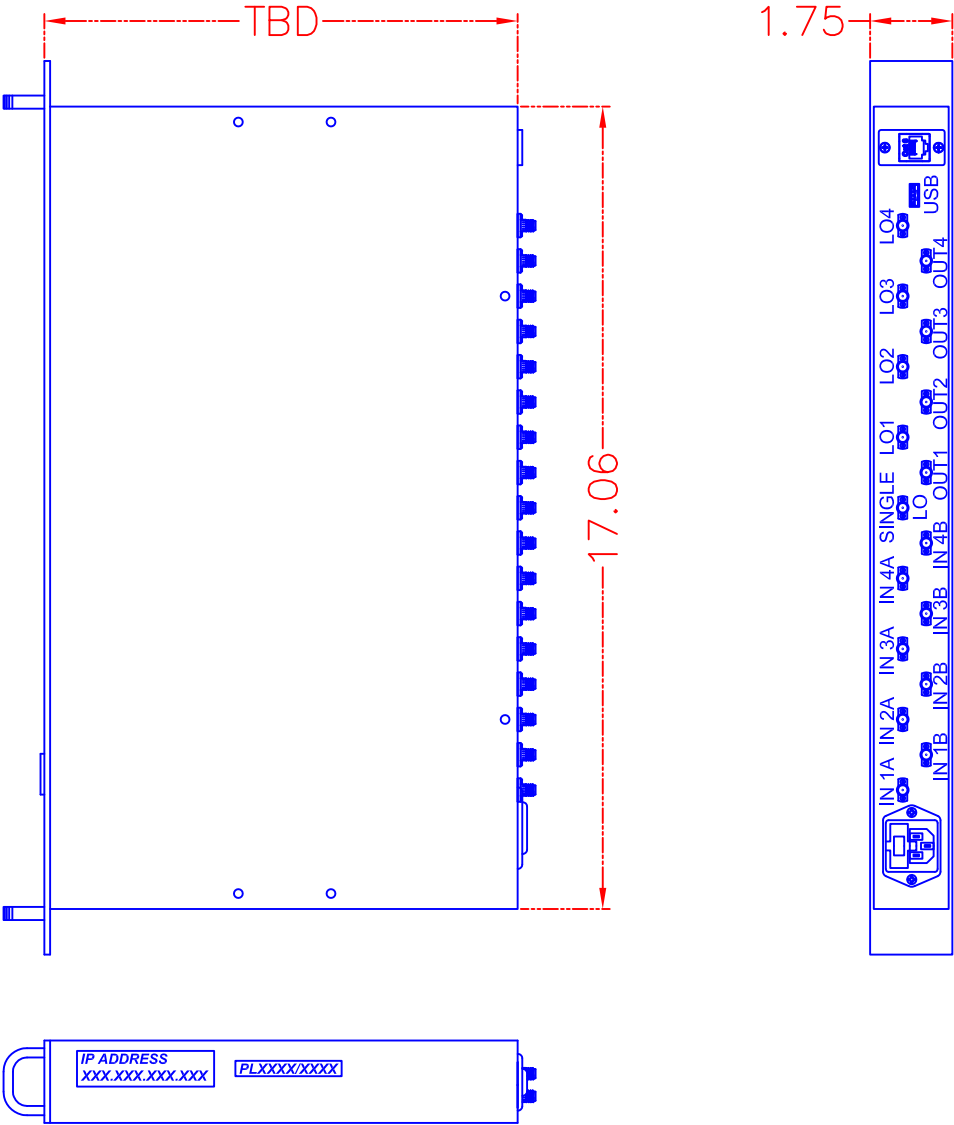
BLOCK DIAGRAM:



- CHANNEL 1:
FREQUENCY (1dB): 4 GHz - 8 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 3 GHz
 ≥ 60 dB @ 9 GHz - 40 GHz
 - CHANNEL 2:
FREQUENCY (1dB): 8 GHz - 12 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 7 GHz
 ≥ 60 dB @ 13 GHz - 40 GHz
 - CHANNEL 3:
FREQUENCY (1dB): 12 GHz - 16 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 11 GHz
 ≥ 60 dB @ 17 GHz - 40 GHz
 - CHANNEL 4:
FREQUENCY (1dB): 16 GHz - 20 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 15 GHz
 ≥ 60 dB @ 21 GHz - 40 GHz
- CHANNEL 5:
FREQUENCY (1dB): 32 GHz - 36 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 31 GHz
 ≥ 60 dB @ 37 GHz - 40 GHz
 - CHANNEL 6:
FREQUENCY (1dB): 36 GHz - 40 GHz
VSWR: $\leq 2.0 : 1$ @ Passband
REJECTION: ≥ 60 dB @ DC - 35 GHz
 ≥ 60 dB @ 41 GHz - 50 GHz
- THRU CHANNEL:
FREQUENCY: 70 MHz - 40 GHz
VSWR: $\leq 2.0 : 1$ @ 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 B	FSCM NO. 05XQ0	DWG NO. PRELIMINARY	REV. 2
			SCALE N:S		SHEET 1 OF 1	

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