

MPDSnCmX Phase Locked, Multi outputs, Multi channels DDS Synthesizer

Product Overview

The MPDSnCmX is a multi outputs driver based on DDS (Direct Digital Synthesizers) which offer high frequency accuracy and stability. Each DDS operates with a common clock reference so that they provide phase locked output signals when driven at same frequency. The frequency and power are driven through USB/RS232 communication. External control signals allow user for fast AM control of the channels/outputs. Embedded power amplifiers up to 4 watts per output. For higher power, AA will provide external power amplifiers.

Features

- Phase Locked Outputs
- Multi Outputs, Multi channels
- Analog AM controls + USB/RS232 (FM+AM)
- RoHS

Applications

High stability low frequency shifters, Multi-transducers AOMs/AODs, Multi modulators...



OEM version, MPDSnC4X



OEM version, MPDSnC8X

Technical Specifications

Parameter	Units				
Number of outputs (X)		2 to 8			
Number of channels per output ©		Up to 8 per output (Total number of channels max 16)			
Reference clock		Internal Common Reference			
Frequency range (MHz)	MHz	Max 20-200			
Frequency Stability	ppm/°C	Nom +/- 1			
Frequency Accuracy / frequency step	KHz	nom 1			
Frequency control		USB/RS232			
Output RF Power (@1dB compression)	W	Up to 4 watts/output with embedded amplifier (more power with external amp)			
Power Supply OEM version	VDC	24 – nom 1A / 4W / output			
Power Supply Laboratory version	VAC	110 – 230			
External Modulation Input Controls (AM)	V	Analog 0-5/50Ω (1 control per channel)			
External Blanking input Control (AM)	V	TTL/1 KΩ (1 control per output)			
Rise Time/Fall time (10-90%) < 4 watts	ns	Nom 10 @100MHz			
Output Impedance	Ω	50			
VSWR		< 1.5/1			
Extinction Ratio	dB	Nom 45			
Input / Output Connectors		DB25, USB / SMA			
Size / Weight	mm ³	MPDSnC8X: 249 x148 x27.7 or MPSnC4X: 129 x 138 x 27.7			

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Heat Exchange	Conduction through baseplate for OEM versions Stand alone (fan integrated) for laboratory versions				
Operating Temperature	°C	10 to 40 (max Tcase 50 °C)			
Storage Temperature	°C	-40 to +70 Non condensing			

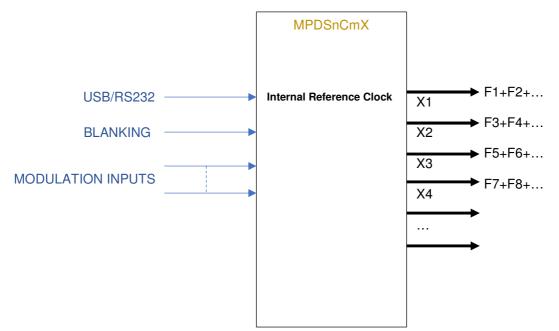
Available Versions

Number of outputs → Number of channels ↓	2	3	4	5	6	7	8
1	1C2X	1C3X	1C4X	1C5X	1C6X	1C7X	1C8X
2	2C2X	2C3X	2C4X	2C5X	2C6X	2C7X	2C8X
4	On request*	On request*	On request*	X**	X**	X**	X**
8	On request*	X**	X**	X**	X**	X**	X**

*On request: customization

**X: Not available

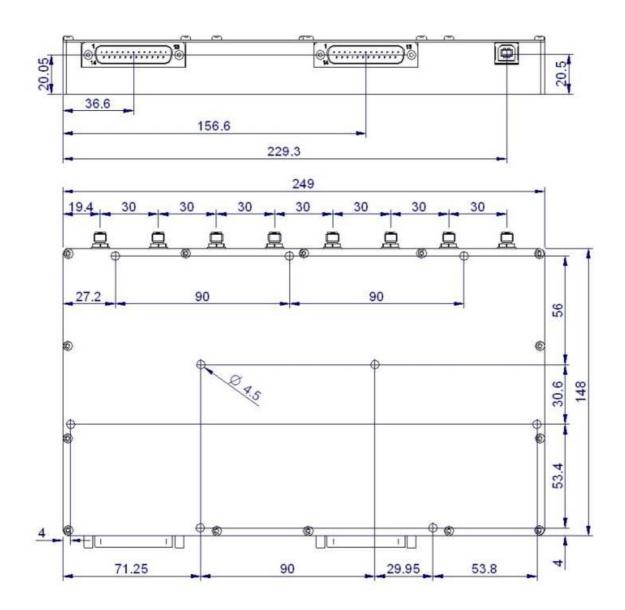
Synoptic







Mechanical drawing – MPDSnC8X



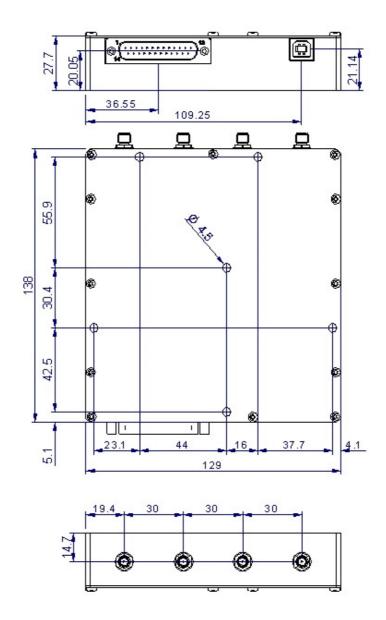
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Mechanical drawing – MPDSnC4X



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