

Product Overview

These drivers based on Direct Digital Synthesizers (DDS), produce multiple fixed stable and accurate RF frequency signals for polychromatic modulators or deflectors. Their design with “on the edge” technology offers unique performance in term of **accuracy, speed and stability (single/multi-line), thanks to their low noise and high linearity design.**

The built in amplifier delivers the necessary RF power to drive the acousto-optic devices, with reduced power consumption.

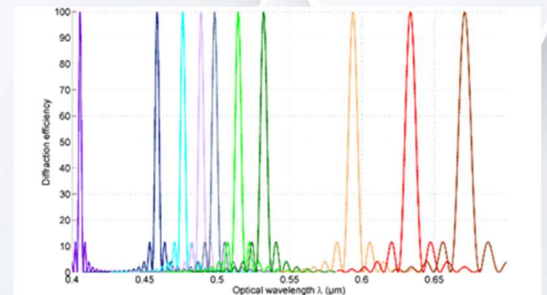
The RF power per output can be individually modulated (MOD IN signals) or simultaneously modulated (BLANKING signal).

The adjustments of the driver (Frequency & Power) can be done with a remote control, USB or through RS232 communication to allow user flexibility in power control or frequency scanning.



FEATURES

- Based on DDS (Direct Digital Synthesizer)
- 1 to 8 simultaneous channels
- Full USB/RS232 control – Analog/Digital external controls
- Bluetooth Remote control (option)
- Self sweeping / Fast frequency settling versions available
- Compact size – Low heat dissipation / High reliability
- Low Noise design
- RoHS Compliant – CE Compliant



How to determine your model

MPDS **8C** - **B** **66** - **22** - **85.135** - **RS** - **BT0**

NUMBER OF CHANNELS

- 1C: 1 channel
- 4C: 4 channels
- 8C: 8 channels

POWER SUPPLY

- **B** 24 VDC
- **D** 110-230 VAC

MODULATION INPUTS / BLANKING ANALOG AND/OR TTL

- **6** 0-10 V
- **5** TTL (BLK only)

OPTIONS

- **RS** RS232
- **19KB** Bauds rate 19200
- **BT(0)** Bluetooth option activated/disabled
- **AFS** Automatic Frequency Sweeping
- **FFPS** Fast Frequency Profiles Setting

FREQUENCY RANGE

- **Fmin.Fmax**

MAX RF POWER PER CHANNEL

- **22** 22 dBm
- **30** 30 dBm (1W)
- **34** 34 dBm (2W)
- ...

SPECIFICATIONS (T=25°C)

Parameter	Specifications
Number of channels	1, 4, 8 (1 output)
Frequency Range	In [20 – 275], Adapted to AO devices
Frequency stability	+/-2 ppm/°C
Frequency accuracy	Nom 1 KHz
Frequency step	Nom 1 KHz
Frequency control	USB Option RS232 / Option Bluetooth (RC04 Remote Control / Android App)
Power supply	24 VDC (< 1A) (OEM) Option 110-230 VAC (Laboratory Rack version)
Rise time / Fall time	Nom 25 ns, < 50 ns
Modulation input control / External	0 – 10 V/ 10 K Ω , switchable to 0-5V through USB/RS232 1 control per channel
Modulation input / BLK controls / Internal	USB / Option RS232 or Bluetooth configurable
Blanking* input control / External	0 – 10 / 10 K Ω , switchable to 0-5V through USB, 1 control per output Option RS232 or Bluetooth configurable
Extinction ratio	Nom 100 dB, MOD IN + BLANKING
Output RF power	[0, 22, 27, 30, 34, 36] dBm total, adapted to AO device
Output impedance	50 Ω
V.S.W.R.	< 1.5/1
Input connector	DB25 (Controls, Power Supply&RS232), USB
Output connectors	SMA (RF power), SMC (Stab)
Size	LxHx 154 x 92 x 24 mm ³ , Option 110-230VAC: Rack 19", 1U
Weight	Nom 0.5 kg, Option 110-230VAC: 4 kg
Heat Exchange	Conduction through baseplate (OEM), Option 110-230VAC: standalone
Operating temperature	10 – 40 °C
Maximum Case temperature	55°C
Storage Temperature	-40 to +70°C, Non condensing
OPTIONS ON REQUEST	RS232 control (RS) Laboratory Rack 19", power supply 110-230VAC Version communication speed 19200bauds (19KB) Version with Bluetooth (BT) Version with Function Automatic Frequency Sweeping (AFS) Version with Function Fast Frequency Profile Setting (FFPS)

*Blanking disabled on MDS1C unless otherwise requested

NOTE: : PC Software for USB/RS232 control and Android App (Bluetooth): Free download on AA Website

**On request MPDSnCmX: Multi-outputs and multi channels versions

**On request MPDSEnCmX: Multi-outputs and multi channels versions with External clock

**On request MPDSPnCmX: Multi-outputs and multi channels versions with Phase control

**On request MPDSnCmX-HR: Multi-outputs and multi channels versions with High resolution <1Hz

OUTLINE DRAWING, mm

