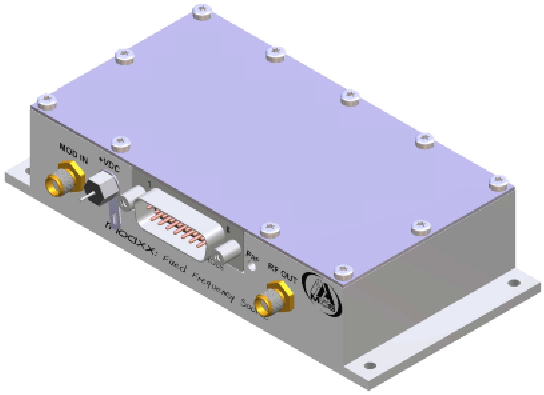
MODAXX 1W & 2W Fixed frequency sources

Fixed frequency sources 20-400 MHz



• High stability • OEM & Laboratory versions

These drivers based on quartz oscillators, produce a fixed stable and accurate RF frequency signal. The built in amplifier delivers the necessary RF power to drive an acousto-optic device.
The RF output can be externally modulated with a convenient input signal, TTL or analog. Cooling is assured by conduction through the baseplate.

Specifications

Carrier frequency	40 - 80 - 110 - 180 - 200 - 250 - 350 MHz
Frequency stability	Nom +/- 1 ppm/°C
Frequency accuracy	< 50 ppm
Power Supply	1 W OEM version : 24 VDC - nom 0.45 A (max 26 VDC) 2 W OEM version : 24 VDC - nom 0.6 A (max 26 VDC) Laboratory version[4] : 110/230 VAC - 50-60 Hz
Rise Time / Fall time (10-90 %)	< 20 ns @40 MHz, < 10 ns @80 MHz, < 8 ns @110 MHz < 5 ns @180 MHz, < 3 ns @F ≥ 200 MHz
Modulation Input Control[1] Video In	Analog 0-5 V / 50 Ω @F ≤ 110 MHz Analog 0-1 V / 50 Ω @F ≥ 180 MHz
Options	1- High Extinction > 100 dB : TTL/1 Kohms –response time 200 ns 2- Analog Power level control : 0-10V/10 Kohms –response time ms
Extinction ratio[2]	nom 45 dB
Output RF power[3]	1 Watt or 2 Watts
Output Impedance	50 Ω
V.S.W.R.	Nom < 1.5/1
Input / Output connectors	SMA-DB15 / SMA
Size	OEM version : 129 x 61 x 30.1 mm^3 Laboratory version[4] : 310 x 250 x 105 mm^3
Weight	OEM version : nom 0.3 kg Laboratory version[4] : 3.6 kg
Heat exchange	OEM version : Conduction through baseplate Laboratory version[4] : stand alone
Operating temperature	10 to 40 °C
Maximum case temperature	OEM version : 50 °C

[1] On request different Video In are proposed : 0-1 V/50 Ohms, TTL/50 Ohms-1 Kohms, 0-10 V…
[2] Other values or models on request
[3] Fully adjustable with screw potentiometer from 0 to 1 (2) Watts
[4] These versions are complete turn key systems with minimum set up time.
The source and convenient amplifiers are integrated in a rack which is supplied with 110-230 VAC.
A selection switch on front panel allows the user to select both operating modes:
- CW mode: internal CW modulation of RF power with front panel cursor.
- AM mode: external amplitude modulation controlled through external modulation input.

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MODAXX-By(y)-z(t)-O

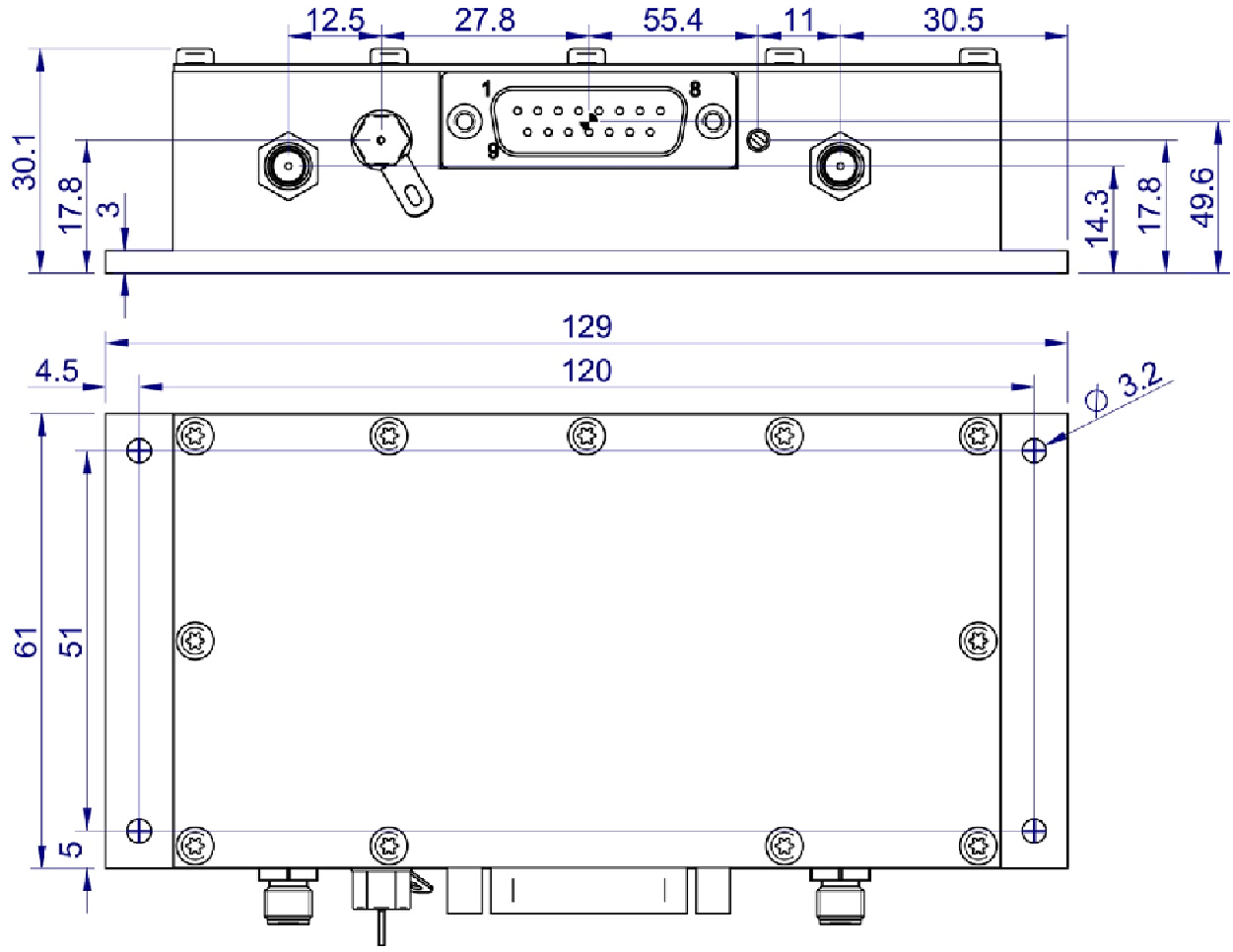
XX : Carrier frequency (MHz)
B : Power supply (B=24VDC, D=110-230 VAC)
y : Modulation input (2=0-1V, 4=0-5V, 5=TTL)
(y) : MOD IN impedance (- =50 Ohms, 500 = 500 ohms, 1k = 1Kohms)
z : Output RF power (30 = 1 W, 33 = 2 W)
(t) : Extinction ratio (- = > 40 dB, 60 = 60 dB)
O : options (H1=high extinction ratio control, P1 : power control)

Pin Connections

1- ANALOG IN 3- TTL IN (option) 5-High Extinction 200 ns (option) 6- NC
8- RF power analog adj (option) 9,11,13,15- +24 VDC 2,4,7,10,12,14- GROUND

Outline Drawing

sizes in mm OEM Version



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