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# HLTMR 80/24-12

RF Generator for Acousto-Optic Q-Switches  
[Q-Switch Driver]



A21117-EN

RF POWER:    5 ... 12 Watt  
DC VOLTAGE:    24 Volt

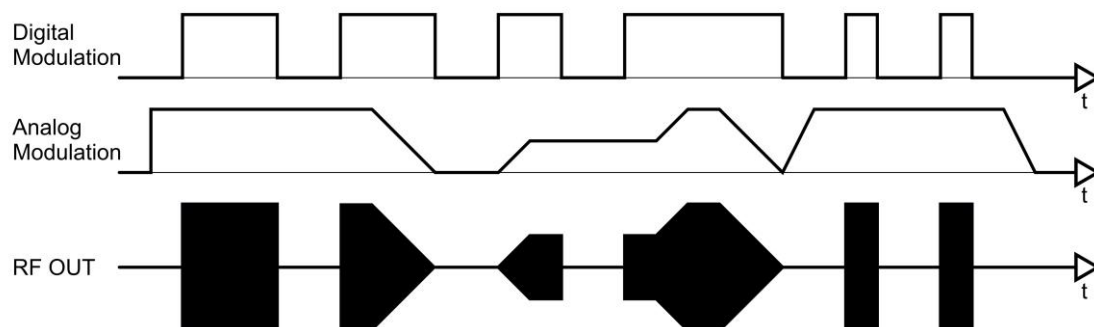


### Performance Data

- Output Frequency 80 MHz according to ISM
- Output Power 5 ... 12 W @ 50  $\Omega$  (adjustable through trim-pot)
- Output Voltage Sinus max. 24.5 V-RMS / 69.3 V<sub>ss</sub> @ 50  $\Omega$
- Output V.S.W.R. VSWR max. 1 : 2.0 @ P-Out = 12 W
- Overload protection Open- /Short- Circuit Proof @ Output

### RF-Modulation

- Analog Modulation 0 ... +5 V  $\hat{=}$  0 ... 100 % Output Power
- Digital Modulation GND = RF OFF  
OPEN (+5 V) = RF ON
- Duty Cycle / Pulse Width min. 200 ns / max. CW
- Fall Time ~10 ns 10 / 90 %
- Rise Time ~20 ns 10 / 90 %
- Repetition Rate 0 ... 300 kHz





Project: Q-Switch Driver 12 Watt

Technical Data

#### Power Supply

- Supply Voltage DC +24 V max. 30 W  
-DC / GND

#### Connectors

- RF OUT SMA-f 50 Ω
- Data IN / OUT 9 pol DSUB (DE-9) Pin 2, 3, 7 & 8 \*)
- DC Connector +24 V 9 pol DSUB (DE-9) Pin 4, 5 & 9 \*)
- GND Grounding Screw / M3
- Cooling Conduction through Housing Bottom

#### Environment

- Operating Temperature 0 ... +50°C
- Storage Temperature -20 ... +80°C

#### Housing

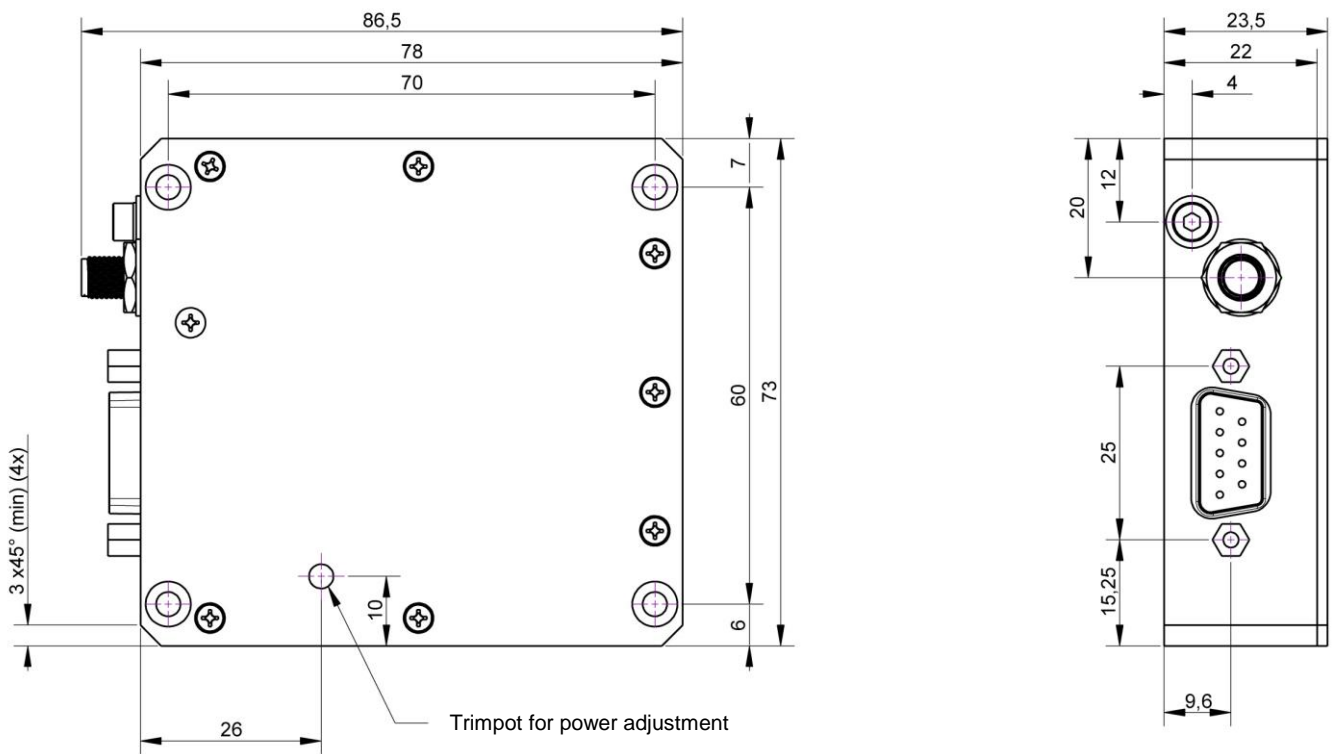
- Material Aluminum alloy / transparent chromated  
Base: solid material, milled  
Cover: 1.5 mm sheet
- Dimensions 78.0 x 73.0 x 23.5 mm (W x H x D)
- Weight 0.220 kg
- Mounting Holes 4 x Ø3.4 mm / 70.0 x 60.0 mm

\*) see Page 05



Project: Q-Switch Driver 12 Watt

Housing





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Pin Assignment 9 pol D-SUB

D-Sub	I/O/P	Description
1	P	GND
2	O	SYNC-OUT 50 $\Omega$
3	I	Digital Modulation +5 / 0 V
4	P	+24 V
5	P	+24 V
6	P	GND
7	O	RF-OK = LOW
8	I	Analog Modulation 0 ... +5 V
9	P	+24 V

