



Hilberling GmbH    Entwicklungslabor    Hochfrequenztechnik  
Heinrich-Hertz-Strasse 2    24790 Schacht-Audorf / Germany  
eMail: info@hilberling.de

# HLTM 80/24-16

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



A290921-EN

RF-POWER:    8 ... 16 Watt  
DC-VOLTAGE:    24 Volt



Project: Q-Switch Driver 16 Watt

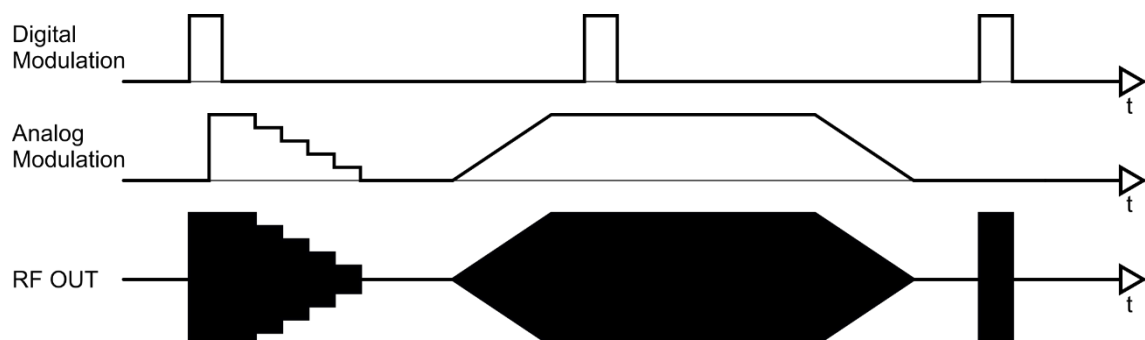
Technical Data

#### Performance Data

- Output Frequency 80 MHz according to ISM
- Output Power min. 8W @ 50  $\Omega$
- Output Power max. 16W @ 50  $\Omega$
- Output Voltage Sinus max. 28.3V-RMS / 80.0V<sub>ss</sub> @ 50  $\Omega$
- Output V.S.W.R. VSWR max. 1 : 2.0 @ P-Out = 16W
- Overload protection Open- /Short- Circuit Proof / Output

#### RF-Modulation

- Analog Modulation 0 ... +5V  $\hat{=}$  0 ... 100% RF Level
- Digital Modulation 0V  $\rightarrow$  RF Level depends on analog Modulation  
OPEN (+5V)  $\rightarrow$  100% RF Level (internal Pullup)
- Duty Cycle / Pulse Width min. 200 ns / max. CW
- Fall Time ~1 ns 10 / 90 %
- Rise Time ~2 ns 10 / 90 %
- Repetition Rate 0 ... 300 kHz





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#### Power Supply

- Supply Voltage DC +24 V max. 25 W  
-DC / GND

#### Connectors

- HF OUT SMA 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

\*) see Page 05

#### Environment

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

#### Housing

- Material Aluminum / 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

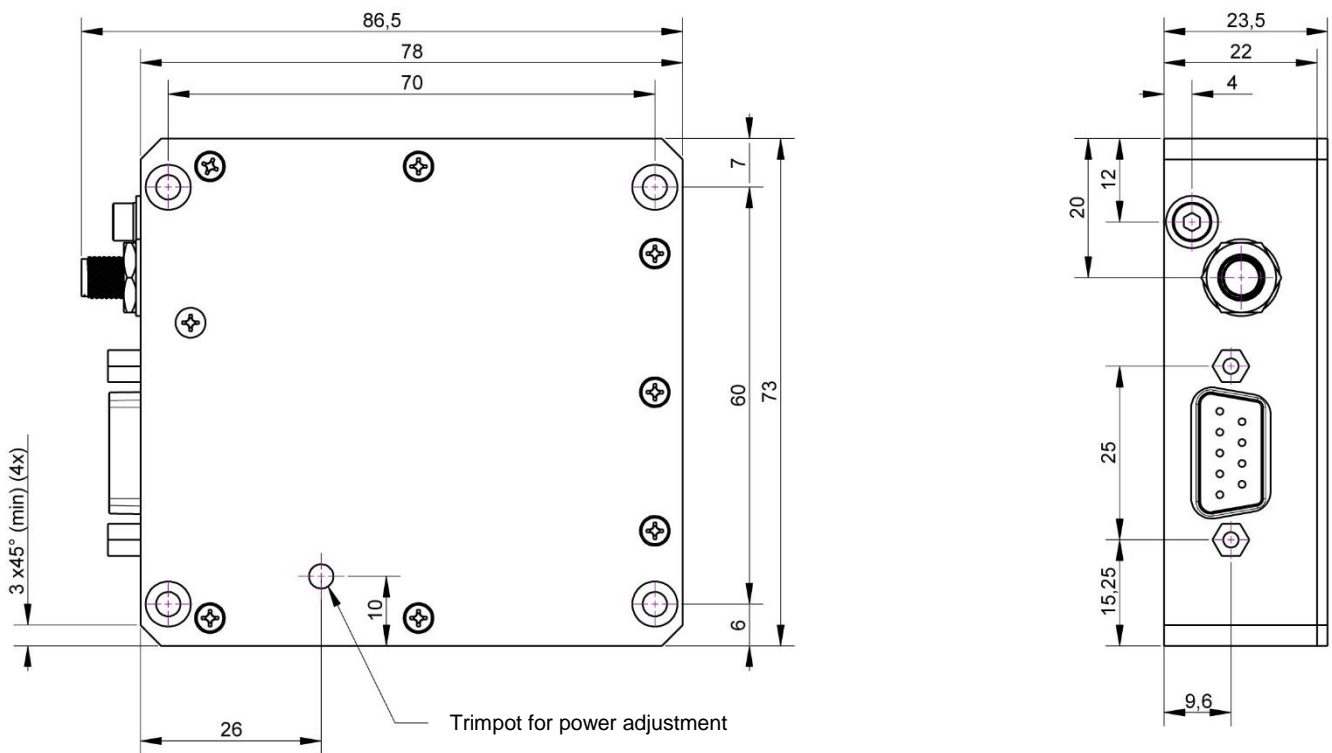
#### Quality Standards / EMC

- Testing Standards CE / EN 50178 / EN 50081-1 / EN 50082-1  
EN 55011



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Housing





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Pin Assignment 9 pol D-SUB

PIN	Function
1	GND
2	SYNC-OUT
3	Digital Modulation +5 / 0 V
4	+24 V
5	+24 V
6	GND
7	HF-OK = LOW
8	Analog Modulation 0 ... +5 V
9	+24 V

