



Hilberling

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HLTR - 80/24 - 12

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



A210513-EN

HF-POWER: 1 ... 12 Watt
DC-VOLTAGE: 24 Volt



Project: Q-Switch Driver 12 Watt

Technical Data

Performance Data

- Output Frequency	80.00 MHz
- Output Power min.	1 W @ 50 Ω / ALC* controlled
- Output Power max.	12 W @ 50 Ω / ALC* controlled
- Control Time	approx. 2 μ s
- Output Voltage	Sinus max. 24.5 V-RMS / 69.3 V _{ss} @ 50 Ω
- Output V.S.W.R.	VSWR max. 1 : 2.0 / P-Out = 12 W
- Overload Protection	Open- /Short- Circuit Proof / Output

*Automatic Level Control

RF-Modulation

- Analog Modulation	0 ... +5 V $\hat{=}$ 0 ... 100 % Output Power
- Digital Modulation	TTL high / low = +5 V / 0 V
- Duty Cycle / Pulse Width	min. 500 ns / max. CW
- Fall Time	~10 ns 10 / 90 %
- Rise Time	~200 ns 10 / 90 %
- Repetition Rate	0 ... 300 kHz
- Switch-off Time	< 500 ns without Synchronization



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Technical Data

Power Supply

- Supply Voltage DC +24 V \pm 10% max. 32 W
-DC / GND

Connectors

- HF-OUT SMA 50 Ω
- Data IN / OUT 9 pol DSUB (DE-9) Pin 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 Plate
- Dimensions 107.5 x 25.0 x 73.0 mm (W x H x D)
- Weight 0.3 kg
- Mounting Holes 4 x \varnothing 3.4 mm / 70.0 x 60.0 mm

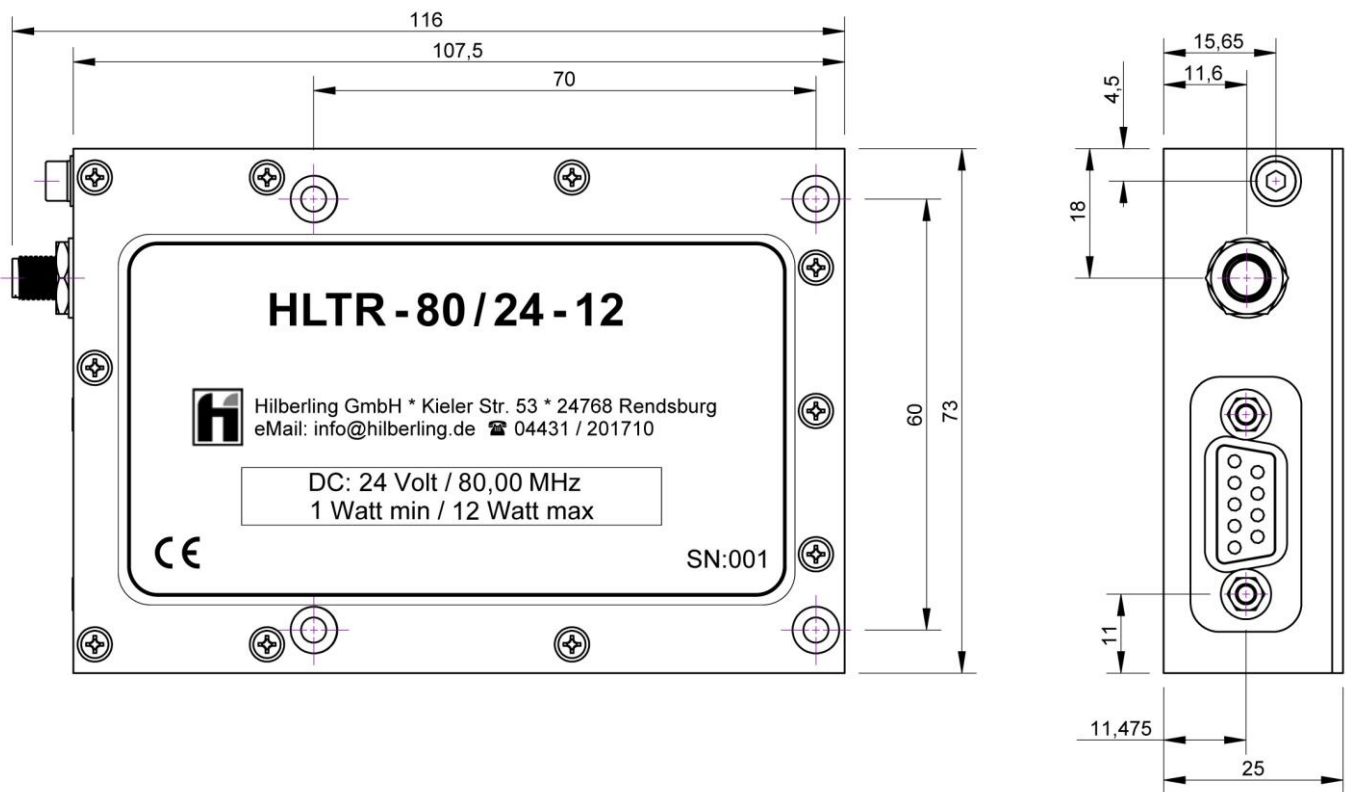
Quality Standards / EMC

- 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	NC
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

