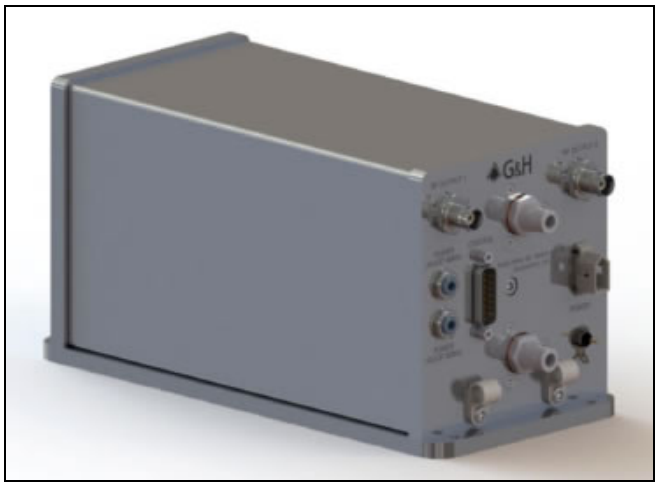
Sintec Optronics

Ge AOM RF Driver (40/60MHz, 2x75 Watt)

HP040-060-150ADG-A10-2X

The HP040-060-150ADG-A10-2Xdriver provides up to 150 Watt combined output power and is designed to drive dual frequency germanium acousto-optic modulators. The driver can be operated with modulation frequencies (analogue and digital) up to 1 MHz for RF amplitude control and up to 5 MHz for drive frequency control. Water cooling parts made from copper ensures highest standards for corrosion protection. Optimum EMC shielding and mechanical protection is achieved by an aluminium casing and a conductive surface passivation. This product conforms to the requirements of the European Union Directive 2011/65/EU of the European Parliament and of the Council on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment.



Key Features

Combined RF output power up to 150 Watt•
Constant output power design•
High SWR and Overheat safety shutdown•
Copper cooling parts•
Compact casing, fully shielded (EMC)

Applications:

Industrial (material processing): PCB via drilling; Marking and engraving; Micro-perforation.

Supply voltage	+24 VDC
Supply current	typ. 15A @ 150 W RF output power
Number of channels	2
Maximum RF output power (adjustable) * Adjustment range	> 75 Watt W per channel < 1 … >75 Watt per channel
Output impedance	nom. 50 Ω
RF output frequency	40MHz and 60MHz switchable (RF Signal phase shift between channels at 40 and 60MHz)
Frequency accuracy	< ±50 ppm
Frequency stability	< ±50 ppm
Extinction ratio	> 40 dB
Harmonics distortion*	< -26 dBc @ 75W per channel
Spurious level *	< -50 dBc
Analogue modulation Impedance Voltage range @ 50 Ω The voltage range corresponds to 0 to 100% of the potentiometer pre-adjusted maximum RF output power.	 600 Ω 0 … +10 (0…+5 option)
Digital / Frequency modulation Impedance Level	4.7 kΩ (pull-up) TTL compatible (V_ IL= 0.8V, V_IH = 2.0); Logic High = RF On / 40MHz; Logic Low = RF Off / 60MHz

Maximum modulation frequency (Amplitude – digital and analogue) (Drive frequency)	 1 MHz 5 MHz
Digital / Analogue modulation RF rise time / fall time (10 … 90%)	 < 100 ns

* into 50 Ω load)

Connectors, Cooling, Dimensions, Weight

- RF output connector: 2xBNC female
- Control connector: D-Sub 15-pole, male for pin assignment refer to section Input Connectors
- Power supply connection: Primary: Molex 03-09-2021; Mating: Molex 03-09-1022 (Shell), 02-09-1104 (Crimp contacts); Secondary: Solder-in style connector or pin polarity assignment refer to section Input Connectors
- Cooling: Cooling block material: Copper, 2 x G 1/4'' thread fitted with 6mm push in connectors
- Flow rate: More than 2 litre/minute at 250C ± 100C
- Coolant pressure:< 100 psi (6.9 bar)
- Dimensions [mm]: 240x110x123 (length x width x height)
- Weight: 4 kg