

# IRGX

## Integrated Radio Guidance Transmitter

- 16-Channel operation.
- UHF and multi-frequency support.
- User-friendly programming and setup.
- 9 'Fast' and 7 'Slow' Channels.
- Active interface to High power amplifiers.



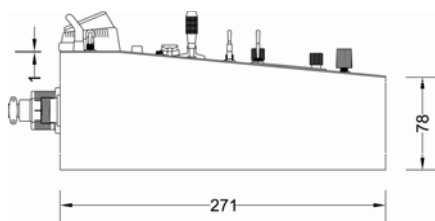
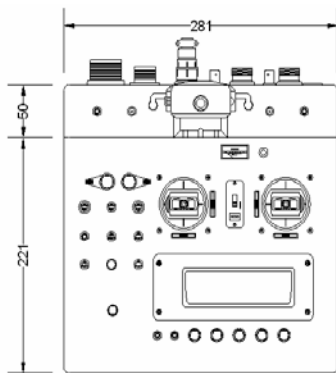
The IRGX transmitter is INTEGRATED DYNAMICS field-proven solution to external piloting requirements without the problems normally associated with competing systems.

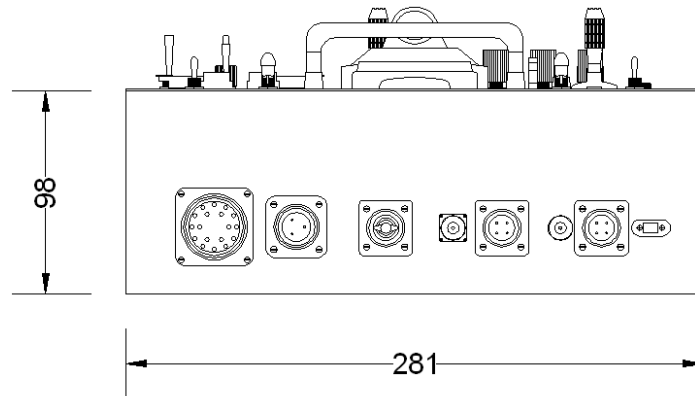
The IRGX can be configured to operate in standard RC-type bands (27-72 MHz) or in the UHF range from 450-460 MHz. DSS (Digital Spread Spectrum) options are coming soon.

The IRGX is supplied as a ruggedised 10-channel JR PCM Tx operating in the UHF band; as a 16 channel Tx; or, in either version, working through a choice of High Power amplifier/antenna combinations to provide up to 120 watts power for long range control of UAV platforms.

HPA's (High Power Amplifiers) can be supplied in both VHF and UHF frequencies with matching high gain IsoPole or Yagi periodic antennas. Channel extension up to 36 channels can be supported through software changes in the Motorola 68HC11 series microcontroller board integral to the IRGX unit.

Call us for details on custom configurations.





Specifications	
<b>RF CHARACTERISTICS</b>	
Frequency range	27-460 MHz (Specify Frequency)
Frequency Stability	-0.0025%
Minimum Output Power	1 Watt
VSWR	< 1.5:1
Spectral Purity	Spurious rejection better than 55dbW
RC Channels	10 Standard and up to 36
<b>MODULATION CHARACTERISTICS</b>	
Type	True FM
Frequency Response	10 Hz to 10 MHz
Input Impedance	50 Ohms
Frequency Deviation	+/- 4 MHz
Deviation Sensitivity	+/- 4 MHz / V.P.P +/- 10%
Linearity	Differential Gain < 2% Phase < 2%
Incidental Frequency Modulation	<10 KHz RMS
<b>POWER REQUIREMENTS</b>	
Input Voltage	9.6 VDC reverse polarity protection
Input Current	0.5 Amps (Not including HPA)
Isolation	Power / Modulation returns grounded to case
<b>ENVIRONMENTAL CHARACTERISTICS</b>	
Temperature	-40° to +80°C
Vibration	20 g peak - 3 Axes
Acceleration	80 g - 3 Axes
Shock	100 g – half sine 11 ms - 3 Axes
Relative Humidity	95%
Low Pressure	1/1000000 mBar
Electromagnetic Compatibility	MIL-STD 461A-462-463
<b>MECHANICAL CHARACTERISTICS</b>	
Dimensions	Refer to drawing
Weight	1000 gm +/- 50 gms
Pin Connections	Refer to drawing
Connectors	Refer to drawing