

GMS-IV Series - Datasheet

High gain, low noise sensor amplifier for GIS monitoring systems



DESCRIPTION

The GMS-IV is a high sensitivity and high gain sensor amplifier for GIS monitoring systems. The amplifier is powered through the coaxial cable connected to the output. A special protection circuitry protects the input against excessive input power. An integrated soft start reduces the maximum peak current on power up.

KEY FEATURES

- High gain – up to 50 dB, 5 variants
- Frequency range 100 MHz to 2.2 GHz
- Additional surge protection
- Low noise Figure
- External power supply
- Compact design

ELECTRICAL SPECIFICATIONS

ABSOLUTE MAXIMUM RATINGS

Power supply V_{CC}
-10 ... 26 V

Storage temperature
-65 ... 150 °C

Stresses beyond those listed under “Absolute Maximum Ratings” may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specifications is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

OPERATING CONDITIONS @ 25 °C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Power supply	V _{CC}	12	15	18	V
Gain (5 variants)	A	50 dB / 45 dB / 40 dB / 35 dB / 30 dB			dB
Noise figure	NF	-	-	5	dB
Frequency range ¹	-	100	-	2200	MHz
Protection Level	P _{off}	>-39	-	-	dBm
Supply current ²	I _{CC}	-	238	-	mA
Maximum output power ³	P _{max}	-	-	10	dBm
Operating temperature	T _A	0	-	70	°C

¹ With -3 dB gain

² With 15 V power suppl

³ Because of the protection level, the maximum output power may only be reached with a gain of 50 dB

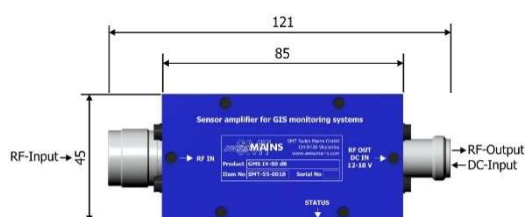
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MECHANICAL SPECIFICATIONS

DIMENSIONS



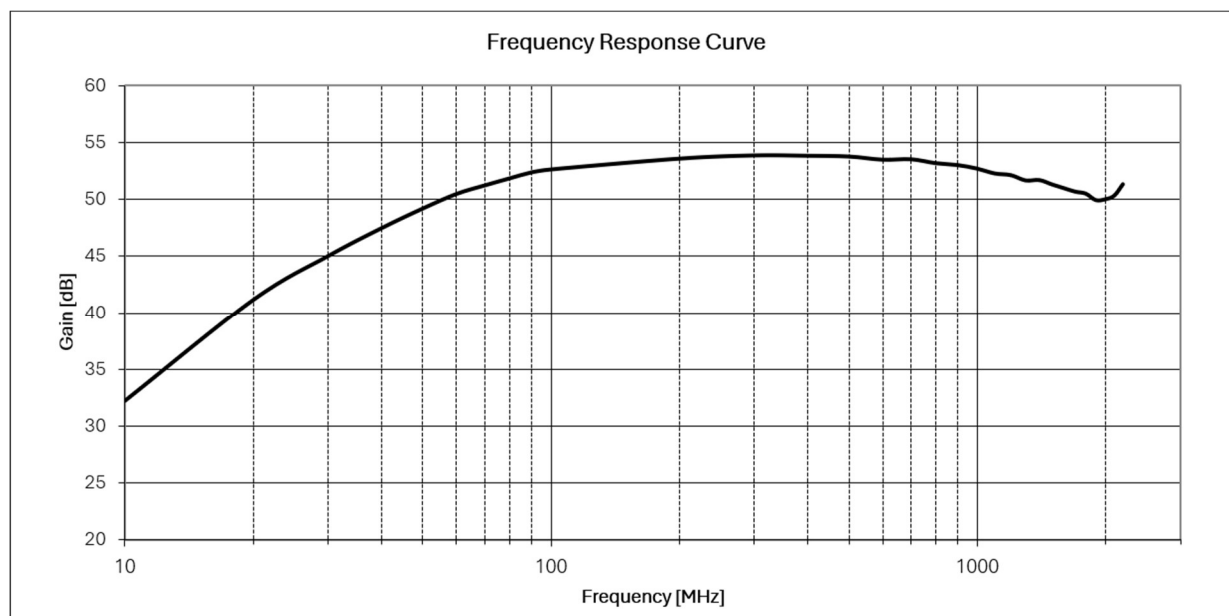
Length total	121 mm
Length housing	85 mm
Width / Height	45 mm
Weight	420 g

CONNECTIONS

RF IN
Type N male
without supply or in protection, the input is shorted to ground

RF OUT / DC IN
Type N female

FREQUENCY RESPONSE



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