

GMS-IV Series

Datasheet

High gain, low noise
sensor amplifier for GIS
monitoring systems

Features

- high gain, up to 50 dB
- 5 different gains available
- frequency range 100 MHz to 2.4 GHz
- low noise figure 5 dB

Applications

- GIS monitoring systems
- High frequency, low noise, high gain applications



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.

Electrical Specifications

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Units
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	Condition	Min	Typ	Max	Units
Power Supply	V_{CC}		12	15	18	V
Gain	A	GMS-IV-50 dB GMS-IV-45 dB GMS-IV-40 dB GMS-IV-35 dB GMS-IV-30 dB		50 45 40 35 30		dB
Noise figure	NF				5	dB
Frequency range		Gain -3 dB	100		2400	MHz
Protection level	P_{Off}		>-39			dBm
Supply Current	I_{CC}	Power Supply = 15 V		238		mA
Maximum Output Power	P_{Max}	(Note 1)			10	dBm
Operating Temperature	T_A		0		70	°C

Note 1: Because of the protection level, the maximum output power may only be reached with a gain of 50 dB.

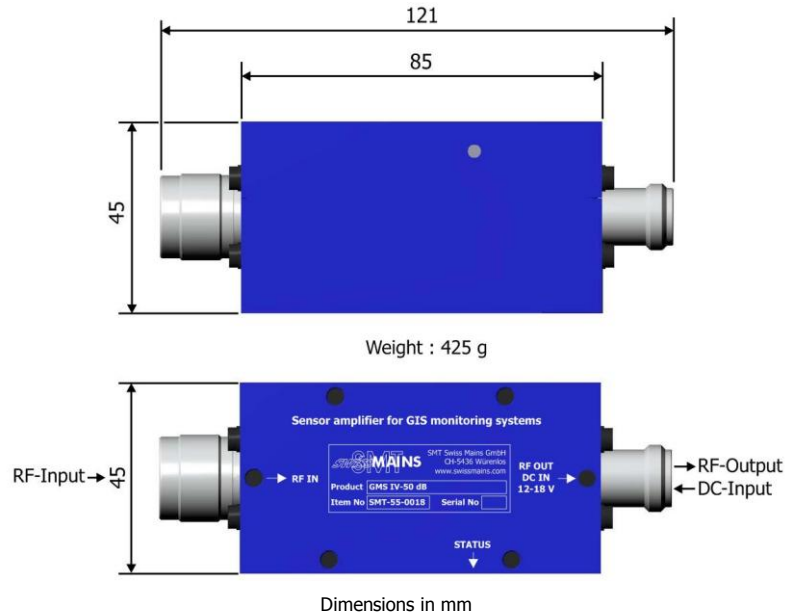
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Mechanical Specification

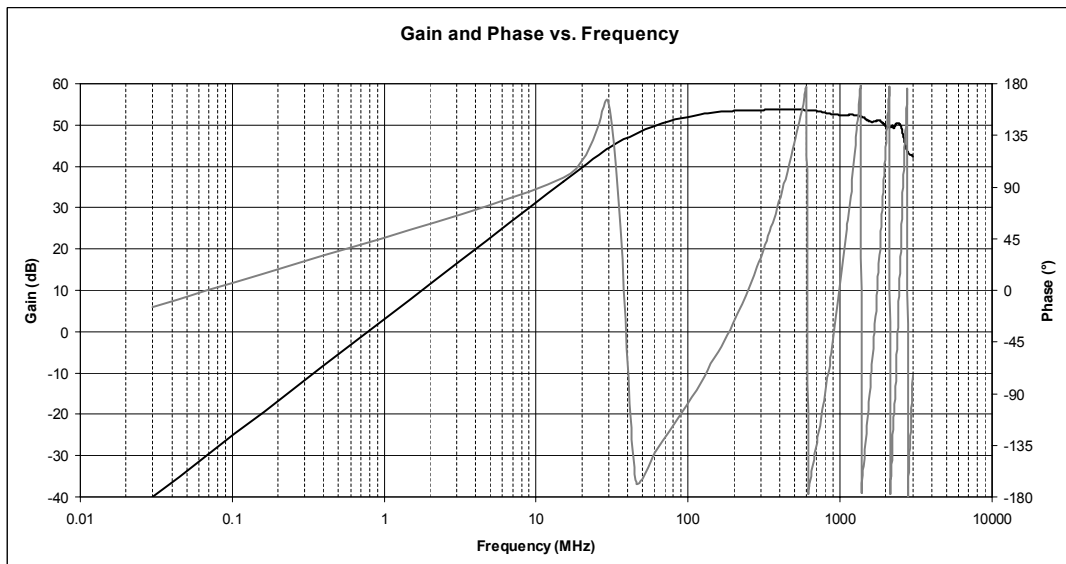
Dimensions



Connections

Connection	Connector	Comment
RF IN	Typ N male	without supply or in protection, the input is shorted to ground
RF OUT / DC IN	Typ N female	

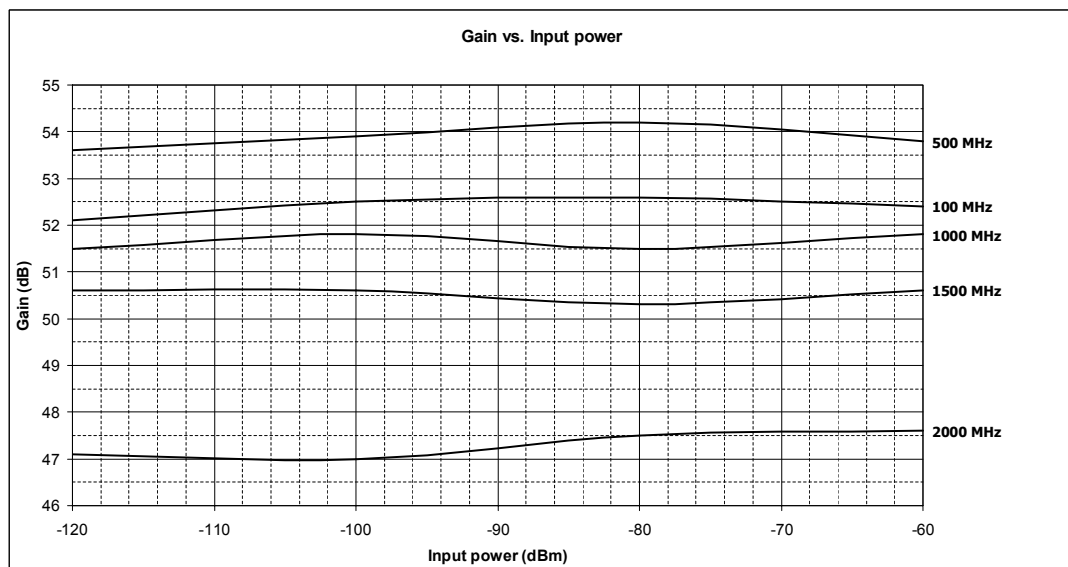
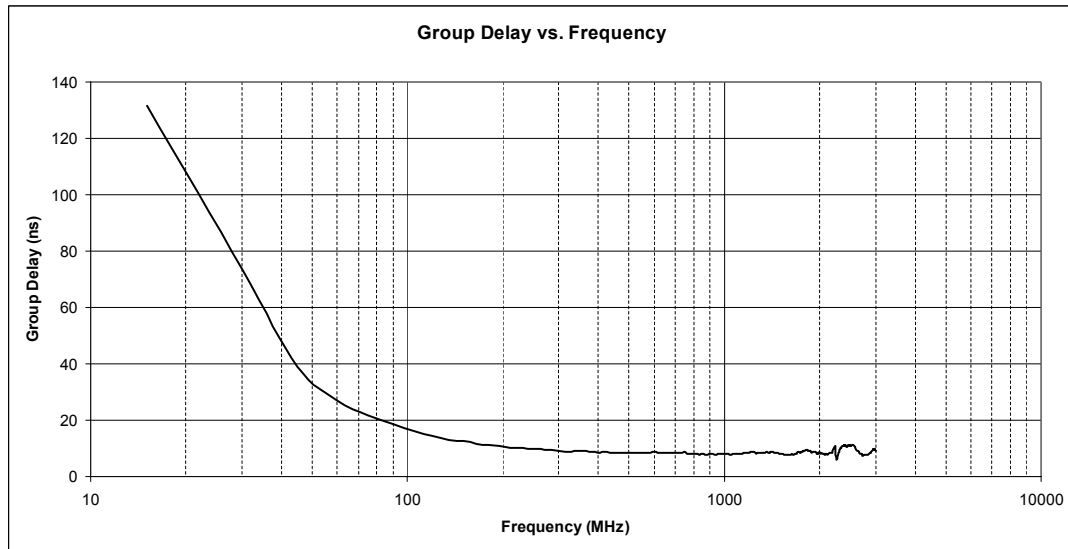
HF Specification



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Ordering Information

Part	Gain	Stocked	Ordering No.
GMS-IV-50 dB	50 dB	yes	SMT-55-0018
GMS-IV-45 dB	45 dB	no	SMT-55-0019
GMS-IV-40 dB	40 dB	no	SMT-55-0020
GMS-IV-35 dB	35 dB	no	SMT-55-0021
GMS-IV-30 dB	30 dB	no	SMT-55-0022

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