

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Astronics / EADS / Racal 5601* at our website: *Click HERE*

RACAL INSTRUMENTS™ 5601



PXI Wideband Amplifier

- **Wideband Range: DC to 20 MHz**
- **High Output Amplitude: 40 V pk-pk into High Impedance, 20 V pk-pk into 50 Ohms**
- **Low Distortion: 0.1%, 10 Hz to 100 kHz**

General
Racal Instruments™ 5601 is a cost-effective, versatile, power amplifier. This 3U, single-slot unit opens the door to numerous PXI-based applications.

With low signal distortion, the 5601 amplifies signals from DC to 20 MHz with a fixed gain (standard gains of 1 through 10 available).

High Output Level.
Unlike other PXI amplifiers with limited output range, Model 5601's proprietary design provides up to 40 V pk-pk into a high impedance load, or 20 V pk-pk into 50 ohms. This is ideal for applications ranging from the automotive industry, with signals from 12 V to 28 V, to aerospace, requiring even higher levels in order to route signals throughout the aircraft body.

The 5601 draws current from the +5 V rail only, freeing up the other PXI supplies to provide their full rated current to other devices.

Ground Isolation
A user-accessible jumper cable configures the signal ground as either floating or connected to chassis ground. With a floating ground, the input and output may move from ground level up to 250 VDC (input and output returns must connect to the same point). This feature is valuable in situations that require a reference other than chassis ground.

EADS NORTH AMERICA DEFENSE

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

5601 PRODUCT SPECIFICATIONS

INPUT CHARACTERISTICS

Connector
BNC

Impedance
50 Ω or 1 MΩ, DC coupled

Damage Level
50 Ω: ±2 V
1 MΩ: ±5 V

Frequency Range
DC to 20 MHz

GENERAL OUTPUT CHARACTERISTICS

(Standard configurations)

Connector
BNC

Impedance
Fixed at 50 Ω, 75 Ω, or 600 Ω
DC coupled

Protection
Short circuit, 10 seconds

Gain
Setting: Fixed
Gain of 1 to 10 available
(other gains by special order)

Polarity
Fixed as Normal or Inverted

Amplitude
0 to 40 V pk-pk into high impedance
0 to 20 V pk-pk into matched impedance (50 Ω, 75 Ω, or 600 Ω)

SINE WAVE CHARACTERISTICS

Bandwidth (-3dB)
Small Signal: 50 MHz, at 2 V pk-pk
Large Signal: 20 MHz, at 20 V pk-pk

Gain Accuracy
±2% of full-scale amplitude + 25 mV, 1 KHz

Flatness, 10V pk-pk
5% of amplitude to 1 MHz
10% of amplitude to 20 MHz

Distortion
THD: 0.1%, 10 Hz to 100 KHz

Harmonics
< -50 dBc, 100 KHz to 5 MHz
< -40 dBc, 5 MHz to 20 MHz (10 V pk-pk)

GENERAL

Physical Size
Single-slot, 3U PXI module

Power Requirements
7.2 W maximum

Current Consumption
+5 V, 3.5 A maximum

Signal Ground
Floated to the same level as the source, 250 VDC + Peak AC maximum

EMC Certification
CE

Safety
Designed to meet EN61010-1, UL 3111-1

Workmanship Standard
Conforms to IPC-A-610D

ENVIRONMENTAL

Operating Temperature
0° C to 50° C, 80% RH (non-condensing)

Storage Temperature
-30° C to 80° C

STANDARD CONFIGURATIONS(1)

Signal Ground
G = Tied to Chassis Ground
F = Floating Ground

Output Polarity
N = Normal (non-inverted)
I = Inverted

Gain
1 through **10**, fixed(2)

Output Impedance
50 = 50 Ω
75 = 75 Ω
6H = 600 Ω

Input Impedance
50 = 50 Ω
1M = 1 MΩ (3)

(1) Standard configurations maintain specified performance. Custom configurations require a special order, and may affect specifications, pricing, minimum quantities, and delivery. Please contact factory for quotation before placing special order.

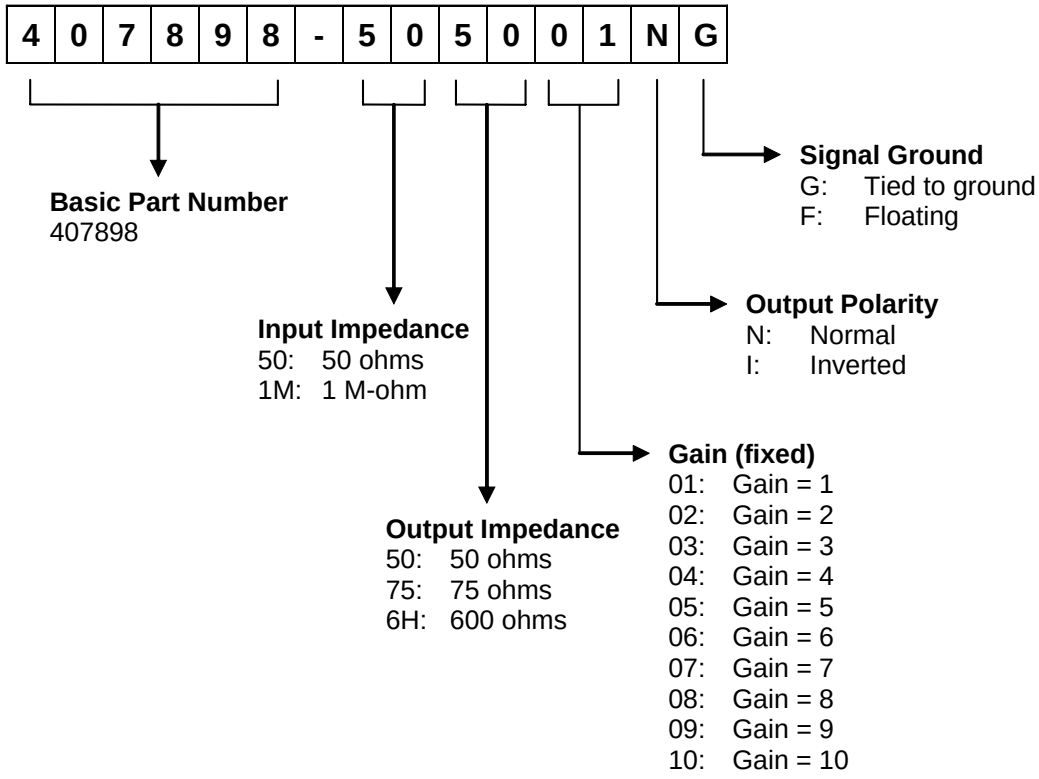
(2) Custom gain above 10 available as special order.

(3) 1 MΩ option available with non-inverting (N) output polarity only.

Model: 5601

Description: PXI Wideband Amplifier

Determine part number as follows:



ORDERING INFORMATION

MODEL/DESCRIPTION	PART NUMBER
Racal Instruments 1258, 64x64 Switching Matrix	407900-001
Racal Instruments 1258, 64x48 Switching Matrix	407900-002
Racal Instruments 1258, 64x32 Switching Matrix	407900-003
Racal Instruments 1258, 64x16 Switching Matrix	407900-004
Racal Instruments 1258, 64x64 Switching Matrix, SMA	407900-011
Racal Instruments 1258, 64x48 Switching Matrix, SMA	407900-012
Racal Instruments 1258, 64x32 Switching Matrix, SMA	407900-013
Racal Instruments 1258, 64x16 Switching Matrix, SMA	407900-014
Racal Instruments 1258 64x64 Switching Matrix, SMB	407900-021
Racal Instruments 1258, 64x48 Switching Matrix, SMB	407900-022
Racal Instruments 1258, 64x32 Switching Matrix, SMB	407900-023
Racal Instruments 1258 64x16 Switching Matrix, SMB	407900-024

The CE Mark indicates that the product has completed and passed rigorous testing in the area of RF Emissions, Immunity to Electromagnetic Disturbances and complies with European electrical safety standards.

The EADS North America Defense Test and Services policy is one of continuous development, consequently the equipment may vary in detail from the description and specification in this publication.

EADS North America Defense Test and Services
1.800.722.2528/1.949.859.8999 sales@eads-nadefense.com

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP