

# AirGuard WQWS Series



RF surge protection for coaxial applications

- Multi application
- Low passive intermodulation (PIM)
- Weatherproof
- 100kA surge current rated
- .82 to .97GHz and 1.7 to 2.2GHz
- No discrete components to fail
- Nickel plated for corrosion resistance



The **WQWS Series (Wideband Quarterwave Tubeless Stub)** of surge protection devices prevent surges and transient overvoltages. The WQWS Series uses an innovative “tubeless” design to achieve **W-I-D-E-B-A-N-D** performance. This compact unit has a high transient current capability with extremely low Passive Intermodulation (PIM).

**Typical applications for the WQWS Series** include the protection of cellular, PCS and even 3G frequencies. It is also ideal as a single stock item device that can be used in any system up to 2,200MHz with outstanding performance.

**Receivers and transmitters** are particularly vulnerable to damage from the effects of lightning. Their remote locations (height above ground) and physical construction make them vulnerable to lightning activity. The use of semiconductors and integrated circuits in transmitters and receivers has

rendered them particularly prone to damage from these disturbances.

**Excellent performance levels** are achieved using a tuned cavity and no discrete components to offer extremely high surge current capability in a rugged, economic, compact enclosure to produce superior surge suppression.

The **AirGuard Series** provides a **wide range of connector** types including BNC, TNC, N-type, SMA and UHF to suit all application requirements. In addition, bulkhead mounting options are provided where insertion into a panel is preferable. The GT and RGT Series are available with a wide choice of voltages: 90V, 145V, 230V, 350V, 470V 600V, 800V or 1,000V.

**Complete facility/site protection** can be achieved by using Atlantic Scientific’s wide range of AC

and DC power surge protection devices to prevent surges entering equipment via their power supply. The ZoneMaster range of protectors combine a high level of protection and when used in conjunction with the ZoneBarrier data protection modules, provide the highest level of site protection available.

## RF Coax Protection

# Specification

[all figures typical at 77°F unless otherwise stated]

**Maximum discharge current**  
40kA (8/20μs)

**Maximum power rating (VSWR)**  
1.15:1

**Frequency Range**  
.82 to .97GHz and 1.7 to 2.2GHz

**Peak Pulse Current (8/20μs)**  
N type - 60kA  
7/16 type - 100kA

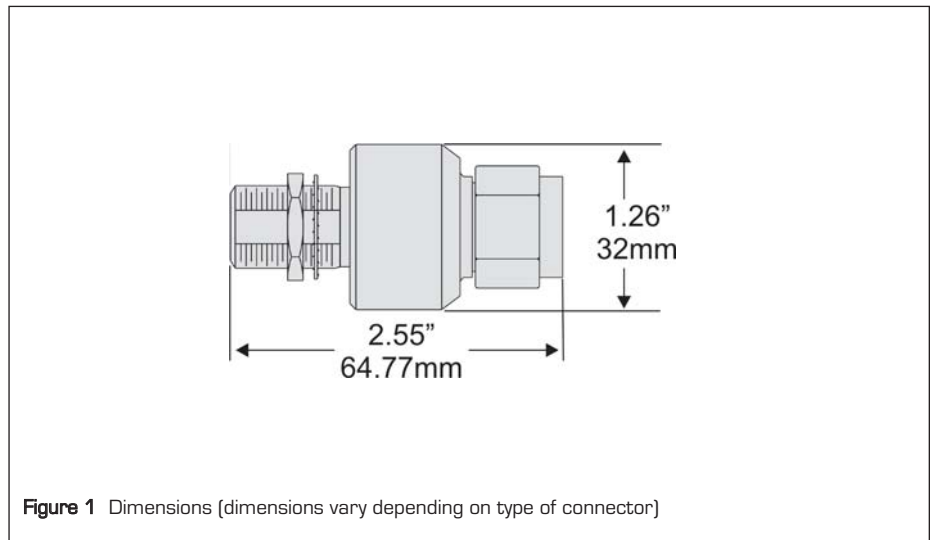
**Impedance**  
50 Ω

Model	Mounting Connector	Second Connector	Impedance (Ω)
51037	7/16 Female	7/16 Male	50
51038	7/16 Female	7/16 Female	50
51039	N Female	N Female	50
51040	N Female	N Male	50

250 piece minimum for 51037 & 51038

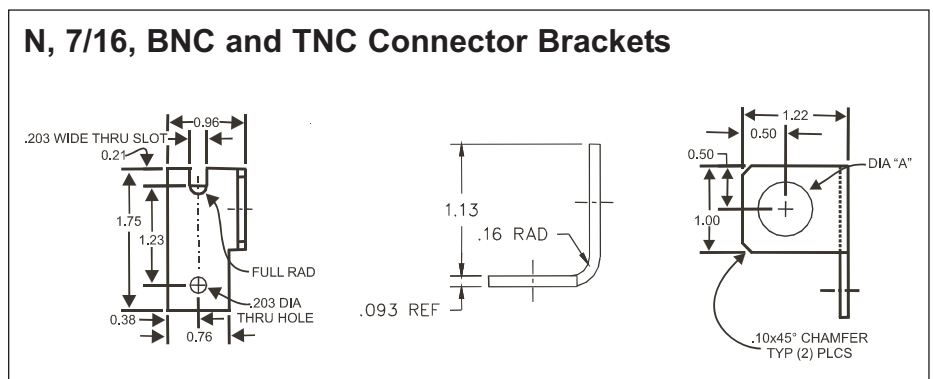
## Optimum Performance Frequencies

Frequency (GHz)	VSWR	Insertion Loss (dB)	Protection Level Cat B3
0.82 to 2.2	1.05:1 to 1.15:1	0.05 to 0.10	12V



## Brackets

Model	Connectors	Diameter
51074	7/16 DIN	1.146" [ 2.91cm]



Note: In accordance with our policy of continuous improvement, we reserve the right to change the product's specification without notice.

## Atlantic Scientific Corporation

4300 Fortune Place, Suite A W. Melbourne, FL 32904 USA  
T: +1 800 544 4737, +1 321 725 8000 F: +1 321 727 0736  
E-mail: sales@atlantiscientific.com W: www.atlantiscientific.com

A member of the MTL Instruments Group plc