

4496 Product Series

GNSS Surge Protective
Device

The 4496 product series are coaxial surge protective devices for **hopf** high frequency antenna systems supporting the Global Navigation Satellite Systems (GNSS) GPS, Galileo, GLONASS, BeiDou and IRNSS/NavIC for precise and reliable time synchronization.



Key Features

- Small form factor device for looping into the antenna cable
- Low insertion loss
- Removable gas discharge tube (GDT)
- DC-pass
- Bi-directional protection
- Mounting kit for wall mounting, mounting plate or mounting on DIN rail according to IEC 60715 TH35

The 4496 product series surge protectors are designed to protect **hopf** GNSS applications supporting the Global Navigation Satellite Systems (GNSS) GPS, Galileo, GLONASS, BeiDou and IRNSS/NavIC against lightning and transients. They form the first level of protection for sensitive equipment and can derive multiple times.

The 4496 product series is waterproof and equipped with replaceable gas discharge tubes (GDT).



4496 Product Series Components

Surge Protective Device

FG4496G00	Coaxial surge protective device for hopf GPS / GNSS high frequency antenna systems <ul style="list-style-type: none"> ■ Protection class according to IEC 60529: IP65 ■ Temperature range: -40°C to +85°C (-40°F to +185°F) ■ Gas discharge tube (GDT) exchangeable ■ Supported cable types: hopf low loss LSZH, hopf SpeedFlex 316 LSZH ■ Connection type: BNC connector (female) / BNC connector (female)
FG4496G01	Coaxial surge protective device for hopf GPS / GNSS high frequency antenna systems <ul style="list-style-type: none"> ■ Protection class according to IEC 60529: IP65 ■ Temperature range: -40°C to +85°C (-40°F to +185°F) ■ Gas discharge tube (GDT) exchangeable ■ Supported cable types: hopf low loss LSZH, hopf SpeedFlex 316 LSZH ■ Connection type: TNC connector (female) / TNC connector (female)
FG4496R00	Gas discharge tube (GDT), spare part for FG4496Gxx

Mounting Kit

FG4496M00	Mounting kit for hopf surge protective devices FG4496Gxx suitable for <ul style="list-style-type: none"> ■ wall mounting ■ mounting plate ■ mounting for DIN rail according to IEC 60715 TH35
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Item Set

FG4496S00	Item set hopf surge protective device consisting of FG4496G00 and FG4496M00
FG4496S01	Item set hopf surge protective device consisting of FG4496G01 and FG4496M00



FG4496G00 with mounting kit FG4496M00 mounted on DIN rail

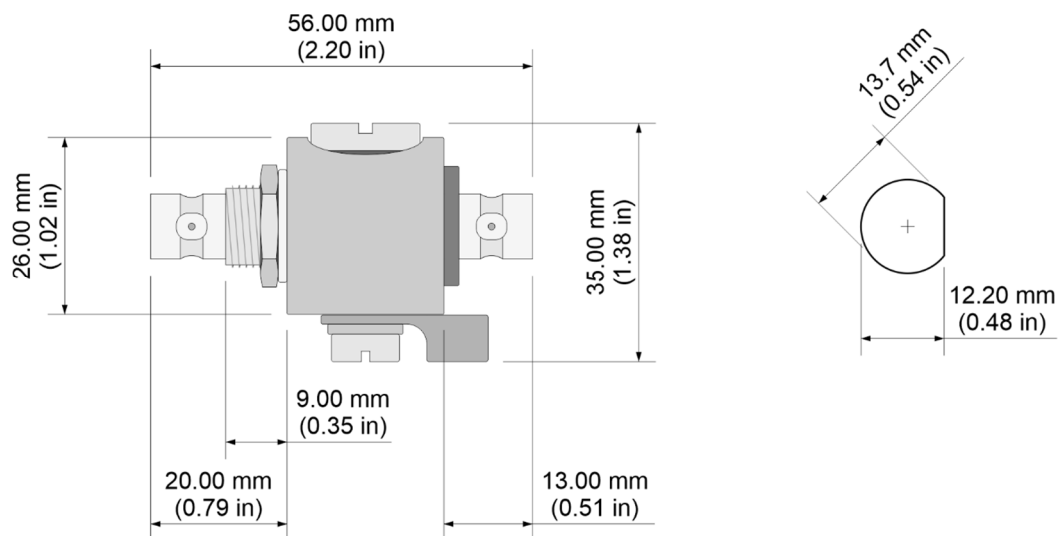
Applied Standards

EN 61643-21:2001 + A1:2009 + A2:2013 <i>IEC 61643-21:2000 + corrigendum 2001 + A1:2008, modified + A2:2012</i>	Low voltage surge protective devices - Part 21: Surge protective devices connected to telecommunications and signalling networks - Performance requirements and testing methods
UL 497C	Protectors for Coaxial Communications Circuits
UL 497E	UL LLC Outline of Investigation for Protectors for Antenna Lead-In Conductors

Technical Specifications

Mechanical Data

Dimensions	See dimension drawing
Material	Brass, surface plating: Cu Zn Sn
Protection Class	IP65 according to DIN EN 60529
Weight	0.1 kg (0.22 lbs)



Environmental Conditions

Operating Temperature	-40 °C to +85 °C (-40 °F to +185 °F)
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Electrical Characteristics

Insertion loss	< 0.2 dB
Return loss	> 20 dB
Impedance	50 Ω
Voltage standing wave ratio (VSWR)	< 1.2:1
Max. load current	10 A
Max. discharge current (max. withstand @ 8/20 μs by pole)	20 kA
Protection level (@1kV/μs (C3))	< 650 V
Impulse current (2 x 10/350μs Test - D1 Category)	1 kA
Nominal discharge current (8/20μs Test x 10 - C2 Category)	5 kA
Max. power	25 W
Typical let through energy ((50 ohms) input 4kV 1.2/50μs - 2kA 8/20μs)	300 μJ
Insulation resistance	≥10 GΩ



Referring to the information in this product sheet: After the editorial deadline of this publication, April 15, 2024, changes may have been made to the product. Subject to changes of structural or design changes, changes to the scope and scale of discounts by the manufacturer during the delivery period as long as the changes or deviations are reasonable under consideration of the interest of the seller to the buyer. Errors and technical data are subject to change without prior notice.

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