

Data sheet of broadband coaxial surge protection BrOK[®], type SPKO-N-x50-1,5G-B / F-M, 50Ω

Broadband coaxial overvoltage protection **SPKO-N-x50-1.5G-B / F-M** is overvoltage protection **T1** (lightning current arrester **class B**) for the band **0 -1.5 GHz**.

It is designed to **protect the inputs of receivers connected to coax. cables to antennas installed outdoors (LPZ 0_B) against the effects of overvoltage**, which can be caused, for example, by the action of elmg. industrial disturbances or thunderstorms.

The protection protects the inputs of the receivers even in the case of a direct lightning strike into the lightning protection system of the protected object **according to the wording of IEC 61312-1**.

The condition for the correct function of each overvoltage protection is its precise electrical connection **to the equipotential busbar EP (HOP) of the building (eg via the secondary busbar PEP or at least with the protective conductor PE of low voltage distribution) by the shortest stranded wire with a minimum cross-section of 2.5 mm²**.

The design of the protection ensures reliable conduction of part of the lightning current (**up to 4 kA**) without thermodynamic destruction of the protection and its surroundings. This allows the installation of BrOK[®] coaxial surge protectors in plastic switchboards.

Type designation: **SPKO-N-x50-1,5G-B / F-M**

Note: x = 0 for basic version up to 50W transmitted power

x = 3 or x = 9 is designed to order (for an additional 15%) up to 350 W or 950 W transmitted power.

Catalog number: **spkon-x50g15b / fm**

Technical parameters of protection:

Measured in the frequency band:

10 MHz – 2,5 GHz

Attenuation / adaptation factor:

≤-0,3 dB/≤ -18 dB (fig. 3)

Test surge current (type) **I_{ZRP}**:

4 kA, 10/350 μs

Residual overvoltage **u (t)** after protection et **I_{ZRP}**:

< ± 100 V_{p-p} , t > 120 ns (fig. 2)

How to connect the protection to the signal path:

-as through cable connector with N/F-M connectors

-to the equipotential busbar **EP (HOP) of the object** by means of a stranded wire **with a minimum cross-section of 2.5 mm²** with a pressed-in cable lug and an M5 screw

Maximum dimensions: length **75 mm**, diameter **37 mm**

Mounting position: **any**

Weight: **87 g**

Protection class: **IP 20**

Fig. 1



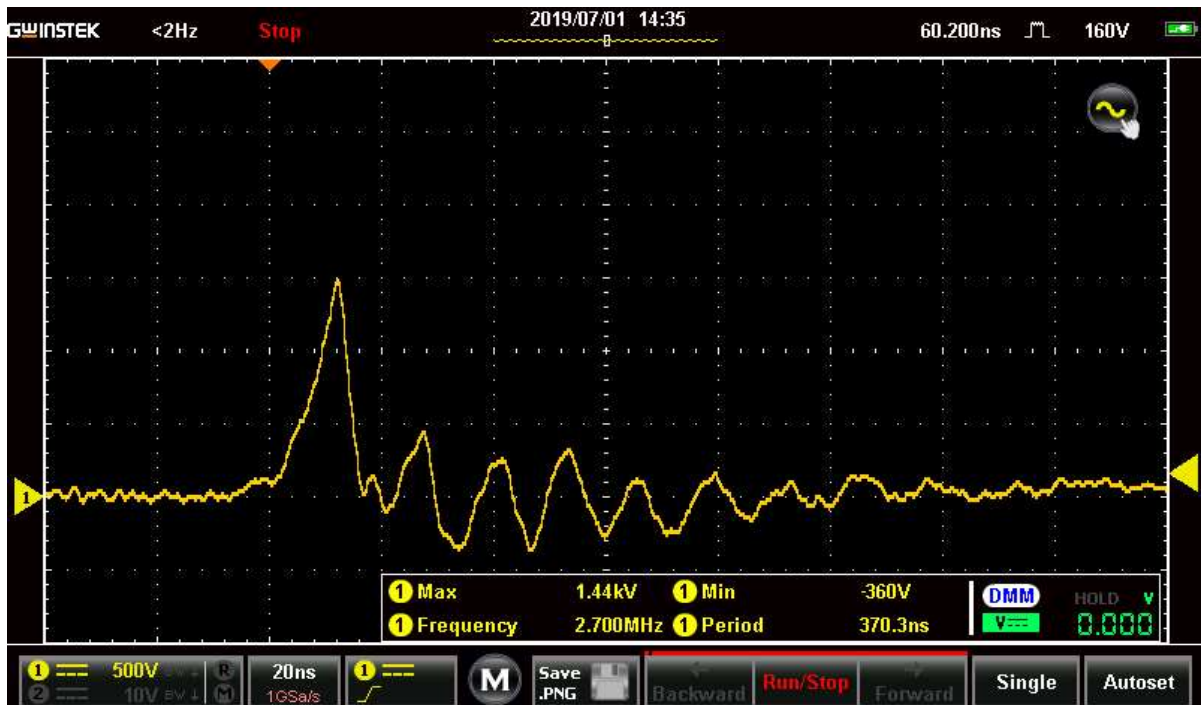


Fig. 2 Oscillogram of the residual overvoltage $u(t)$ behind the protection SPKO-N-050-1,5G-B / F-M in the shock wave test 4 kA, 10/350 μ s.



Fig. 3 Graph of attenuation/adaptation factors of surge protection SPKO-N-050-1,5G-B/F-M in the 10 MHz-2,5 GHz frequency band.

Setting the measuring ranges of the circuit analyzer:

attenuation: 10.0 dB / div (yellow curve)

adjustment: 10 dB / div (green curve), measuring cursor position: 1,50400 GHz

Important notice for users:

For overvoltage protections fitted with a gas surge arrester, it is recommended to periodically check the functionality of the protection at intervals of 1 / year. Measurement is performed by our service for free, we charge only postage on return checked by KPO post. If gas lightning arresters are not functioning properly, we inform the customer and replace them on request (for a fee of 45 CZK / pc without VAT). Therefore, in cases where broadband transmission protection is not required, we recommend the use of maintenance-free narrowband protection with a short-circuited quarter-wave resonator.

The Declaration of Conformity was issued on the basis of Test Report No. P 00/01/06 from the accredited testing laboratory No. 1184, ABEGU a. S., Testing Laboratory.

The overvoltage protection is manufactured according to utility model No: 10494

Surge protectors BrOK[®] - quality at reasonable prices

The warranty period is 24 months from the date of sale. In the event of a dispute, the guarantee of the claimed surge protection is subject to the condition that the installation conditions are checked by the manufacturer's service technician and that the nameplate is undamaged. For the duration of the complaint procedure, we can lend the customer functional surge protection of the same type.

Technical consulting is provided and serviced by the company:

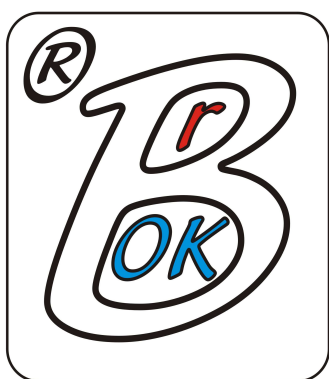
Ing. Vladimír Brok

Business and technical information: VoIP +420 484 351 351,

[mobil: +420 604 489036, e-mail:brok@prepeti.cz, http://www.prepeti.cz](mailto:brok@prepeti.cz)

**Production and service:
Jiráskovo nábřeží 717/61
468 22 Železný Brod
Czech republic, EU**

Recommended retail price without 21% VAT: see **Price list**
Quantity rebates are determined according to Business conditions stated at the end of the **Price List**.



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