

Antenna Datasheet

1D_SL_320x410

frequent

froschelectronics GmbH

Outline Dimension: 320mm x 410mm

Installation Notice:

UL/CSA requires that the antenna is encapsulated or installed in a protective enclosure.

Specification for the usage with the frequent SLRM1000 HF-Interrogator:

Please carefully read this specification and keep the power limits in terms of radiation valid in the country of operation.

$P_{\max} = 8W^*$	Maximum input power in order to prevent overheat*
$0x6A^* (\triangle P_{\max})$	Maximum output power setting on SLRM1000 in order to prevent overheat*
$P_{FCC} = 6W$	Maximum input power in regard to keep FCC limits
$0x60 (\triangle P_{FCC})$	Maximum output power setting on SLRM1000 in regard to keep FCC limits
$P_{CE} = 8W$	Maximum input power in regard to keep CE limits
$0x6A (\triangle P_{CE})$	Maximum output power setting on SLRM1000 in regard to keep CE limits
Cable**	180cm 50 Ohm coaxial; the cable length must be kept
Environment	Indoor use
Operation Temperature	0°C to 55°C
Storage Temperature	-25°C to 85°C
Relative Humidity	10% to 80% (non-condensing)

*This power level is valid until the ambient temperature does not exceed the limit for the operating temperature which is specified in this table. Keep in mind that the ambient temperature may exceed this limit when operating the antenna in a case or an ambient with limited ventilation. For this case the power must be reduced until the ambient temperature of the antenna keeps the limit.

**For the case this cable length is not sufficient, a $\lambda/2$ cable extension can be used. This extension cable can be purchased at frequent.

Tuning procedure:

This succession has to be followed.

1. Place the antenna on site of operation.
2. Ensure that the SLRM1000 is switched off or in idle mode.
3. Connect a SWR-meter (i.e. DAIWA CN-102L or DAIWA CN-801) with a 50 Ohm cable not longer than 15 cm to the SLRM1000.
4. Connect the antenna to the SWR-meter.
5. Switch on the HF output power at the according channel of the SLRM1000.
6. Turn the trimmer capacitor on the antenna until the SWR becomes a minimum.
7. Change the output power of the SLRM1000 until the SWR-meter indicates the output power of your choice, but keep the limits applicable.
8. Store the output power at the SLRM1000 for this antenna at this channel.