



Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

IHR ZEICHEN / YOUR REF. IHR SCHREIBEN / YOUR INFORM. UNSER ZEICHEN / OUR REF.

DATUM / DATE
27-Feb-02

Subject: Applicant: KIRK telecom A/S
FCC ID: PXAPP4-2G4
731 Confirmation Number: EA416877
Correspondence Reference Number: 22022

Dear Sir,

Submitted herewith, on behalf of our customer is an amendment to the subject application, provided in response to your request for technical information:

Q1. Confirm with Speag that the DASY system can do a valid SAR measurement with a Crest Factor of 20.

Answer:

For answer here a short quotation from the DASY User Manual concerning the Crest Factor:

" Pulsed and modulated Signals:

The probes have low-pass characteristics with a corner frequency of around 20 Hz, due to the high probe impedances and the amplifier filters. The probe output does not follow the fast modulations of the RF signal, but gives an averaged (RMS) reading. For signal levels in the square law region of the detector diode, this gives the desired RMS value for any modulation scheme. However, for larger signal levels the averaged signal might be below the compression point, while the peak signal is in the compression area. In that case a compensation would be necessary for all levels above the compression range. The DASY system allows the specification of the crest factor of the signal source.

The crest factor is used to calculate the peak power in the signal and perform the compensation for the diode compression of the peak power"

Q2. Upload the probe calibration certificates with the probe correction factors.

Answer:

The probe conversion factor is 4.8 for x,y,z coordinates.

Additional specification:

Sensitivity in free space: NormX: $1.51 \mu\text{V}/(\text{V}/\text{m})^2$

NormY: $1.45 \mu\text{V}/(\text{V}/\text{m})^2$

NormZ: $1.54 \mu\text{V}/(\text{V}/\text{m})^2$

Diode Compression DCP: 80mV for X,Y,Z

Probe tip sensor center: 2.7 mm

Optical Surface detection: $1.0 * 0.2 \text{ mm}$

We hope this information is sufficient to issue the grant. If you have further questions please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Baschin', with a stylized flourish at the end.

Jürgen Baschin

Electronic Technology Systems Dr. Genz GmbH

Storkower Strasse 38c

D-15526 Reichenwalde bei Berlin

e-mail: baschin@ets-bzt.com