

Updated DASY 4/5 Addition

# HAC Extension

for Testing Hearing Aid Compatibility  
in Accordance with ANSI C63.19

## What is the HAC Extension?

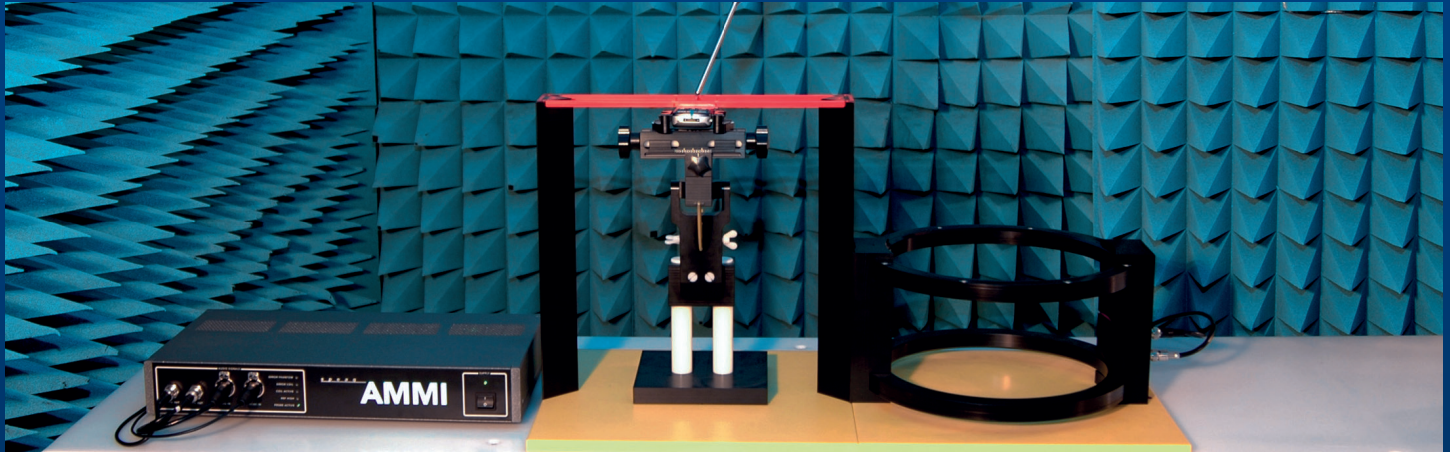
The HAC Extension is an addition for DASY4/5 to enable fast and reliable RF emission tests and audio-band magnetic signal evaluations of wireless devices in accordance with the ANSI C63.19-2007 standard and the forthcoming new bands and definitions (ANSI C63.19-2010 draft).

Automated measurements and the generation of test reports are supported as required by the standard. DASY5.2 supports MIF based on advanced modulation specific probe calibration.

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Specifications	
<b>Test Arch</b> dimensions	enables easy and well-defined positioning of the phone and calibration dipoles as well as simple teaching of the robot 370 x 370 mm x 375 mm
<b>Broadband Calibration Dipoles CD835, CD1880, CD2450</b> frequency bands return loss optional dipoles available	including holder and transportation box 800 - 960 / 1710 - 2000 / 2250 - 2650 MHz >15 - 18 dB over freq. band, typ. > 20 dB at calibration freq. CD700 (680 - 820 MHz), CD2150 (1950 - 2650 MHz), CD2600 (2300 - 2700 MHz), CD3500 (3300-3970 MHz), CD5500 (4900 - 5800 MHz), also packaged as ITDxxxx for immunity testing of hearing aids
<b>Device Holder / Positioner</b> effect on near-field	supports accurate positioning of any phone <+/- 0.5dB
<b>Audio Magnetic Field Probe AM1D Measurements</b> sampling rate dynamic range test signal generation calibration	with integrated, symmetric preamplifier 0.1 - 20 kHz (RF sensitivity <100 dB, fully RF shielded, allows DUT operation without wired connections) -60 - +40 dB A/m (AM1DV3), -69 - +20 dB A/m (AM1DV2) tip diameter / length: 6 / 290 mm, sensor according to ANSI C63.19 sensitivity at 1 kHz, according to ISO 17025
<b>Audio Magnetic Measurement Instrument (AMMI)</b> sampling rate dynamic range test signal generation calibration dimensions	48 kHz / 24 bit 100 dB (with AM1DV3 probe) user selectable and predefined (via PC) auto-calibration / full system calibration using AMCC with monitor output 482 x 65 x 270 mm
<b>Helmholtz Calibration Coil (AMCC)</b> dimensions	370 x 370 x 196 mm, according to ANSI C63.19
<b>Telephone magnetic field simulator TMFS (optional)</b> frequency range calibration	0.1 - 20 kHz, for validation measurements; measurements in air or liquids axial and radial field at 1 kHz according to ISO 17025
<b>HAC Extension Software for DASY4/5</b> precise teaching measurement area evaluation report	easy teaching with adaptive distance verification flexible selection of measurement area, predefined according to ANSI C63.19 RF: automatic exclusion of high-level areas ABM: spectral processing, filtering, weighting and evaluation according to ANSI C63.19 documentation ready for compliance report
<b>Isotropic H-Field Probe H3D (optional)</b> frequency band dynamic range linearity directivity dimensions	200 - 3000 MHz (free space) 10 mA/m to 2 A/m at 1 GHz ± 0.2 dB (100 MHz to 3 GHz) ± 0.25 dB (spherical isotropy error) tip diameter / length: 6 / 330 mm
<b>Isotropic E-Field Probe ER3D (optional)</b> frequency dynamic range linearity directivity dimensions	100 - 6000 MHz 2 V/m to > 1000 V/m ± 0.2 dB (100 MHz to 6 GHz) ± 0.2 dB in air (rotation around probe axis) ± 0.4 dB in air (rotation normal to probe axis) tip diameter / length: 8 / 330 mm
<b>Isotropic E-Field Probe EU2D (optional)</b> frequency dynamic range linearity directivity dimensions	recommended for > 3 GHz, high spatial resolution, gives field polarization 100 MHz to > 6 GHz 10 V/m to > 1000 V/m ± 0.2 dB (100 MHz to 6 GHz) ± 0.2 dB (spherical isotropy error) tip diameter / length: 2 / 330 mm

For further information and technical specifications visit [www.speag.com](http://www.speag.com)

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WWW.SPEAG.COM

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland · Phone: +41-44-245-9700 · info@speag.com

## Representatives

### China

Auden Techno Corp.  
Phone +86-21-6163-1930-2  
[www.auden.com.tw](http://www.auden.com.tw)

### Taiwan

Auden Techno Corp.  
Phone +886-3-363-1901  
[www.auden.com.tw](http://www.auden.com.tw)

### Japan/China

PTT Company, Ltd.  
Phone +81-3-5781-5130  
[www.pttco.co.jp](http://www.pttco.co.jp)

### Korea

Dymstec  
Phone +82-31-777-8450  
[www.dymstec.com](http://www.dymstec.com)

### USA

Beacon Technical Sales, Inc.  
Phone +1-603-880-0092  
[www.beacon-tech.com](http://www.beacon-tech.com)

### India

BNN Communication Engineers  
Phone +91-120-421-2415  
[www.bnncom.com](http://www.bnncom.com)

## SEMCAD X only

### China

Beijing Tianyuan Technology Co., Ltd.  
Phone: +86-10-6822-1702-12  
[www.tianyuantech.com](http://www.tianyuantech.com)

### Italy

Telprom SRL  
Phone: +39-039-326-286  
[www.telprom.it](http://www.telprom.it)