

## The new HFS-865 series for measurements up to 12 GHz

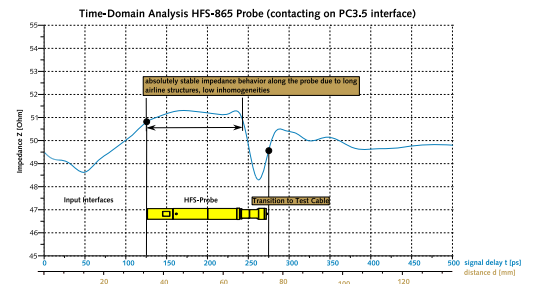
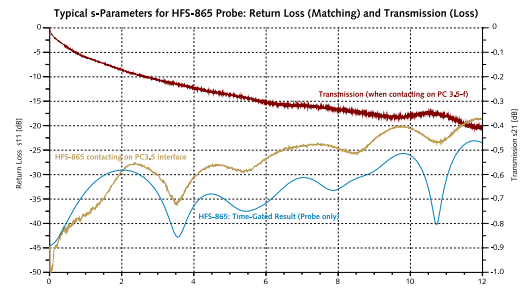
The new RF Probe HFS-865 has been developed to be used for highest frequency signal applications. Even at frequencies as high as 12 GHz the Probe provides outstanding electrical behavior. Excellent return loss and transmission characteristics ensure a reliable way of applying or picking up signals.

In combination with MMPX™-cable assemblies, INGUN offers a complete and unique testing solution.

Sophisticated measurement techniques to meet the demands of the future!

### The advantages:

- true 12 GHz performance (excellent return loss (VSWR) and transmission behavior)
- very homogenous signal transmission characteristics due to a low amount of dielectric parts and long airline-structures
- precision input interface: Huber+Suhner MMPX™-series
- available cable assemblies: MMPX™ plug (either straight or angular-shaped interface) and flexible microwave cable (high precision). Rear end: PC3.5-m plug (fully mateable with SMA)
- characterized HFS-865 probes and cable assemblies with test report on request



### Electrical Characteristics (typical values)

		<b>HFS-865 308 110 A 5343 E1F</b>
Nominal Impedance	$Z_0$	50 $\Omega$
Return Loss	$ S_{11} $	$\geq 25$ dB @ 6 GHz $\geq 17.5$ dB @ 12 GHz
Insertion Loss		.3 dB @ 6 GHz .45 dB @ 12 GHz
Max. Operating Frequency	f	12 GHz
Velocity of Propagation	v	$\sim .91 \cdot C_0$
Signal Delay	$\tau$	143 ps
Phase	$\varphi$	289.6° @ 6 GHz 578.2° @ 12 GHz
Capacitance	C'	73 pF/m
Inductance	L'	.182 $\mu$ H/m
Measurement results include the contacting interface (PC3.5) and the MMPX-adaptor		

Prices and Delivery Time on request.  
 Technical changes possible without prior notice.

- Part Numbers:**
- **HFS-865 308 110 A 5343 E1F**  
for SMA-f (further spring forces on request)
  - **HFS-865 308 152 A 5343 E2F**  
special design for PC3.5-f only (further spring forces on request)
  - **SE-865-V-MMPX-PC35-80**  
assembly length: 2 ft 8 in (.8 m), MMPX™ plug (straight version), PC3.5-m (straight version)
  - **SE-865-V-MMPX-W-PC35-80**  
assembly length: 2 ft 8 in (.8 m), MMPX™ plug (angular version), PC3.5-m (straight version)

**Please note:**  
 Due to the precision mechanical structures inside the Probe it is highly recommended to carefully consider how to mount the probes inside the dedicated Test Fixture in order to prevent the risk of short circuits, damage to the probe or deteriorating the signal flow. High shear forces have to be avoided.