Introducing the modular ACUTRONIC s
More options, lower cost of ownership

ACUTRONIC was proud to release the newly designed simex™ONE series at th
Testing Expo in Stuttgart and the Air Show in Paris in spring 2009.

Different configurations of stands and table tops

Optional configuration with temperature chamber

Highly accurate, highly reliable

The new ACUTRONIC simex™ series of rotary motion tables is designed to provide angular rate stimuli, acceleration, and position to inertial sensors. **simex™**ONE is the first member and will soon be followed by **simex™**TWO and **simex™**THREE. All test tables feature a highly accurate and reliable closed loop direct drive servo system consisting of a drive assembly, servo controller and power amplifier.

More options, shorter lead times

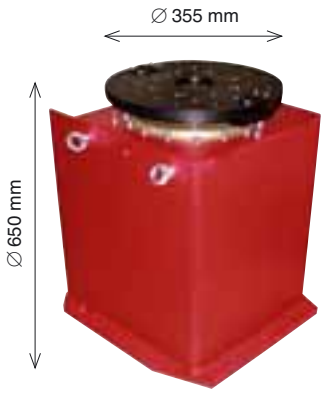
Thanks to its modular design, the ACUTRONIC **simex™** series offers a wide choice of options in terms of size, system performance, and configurations. At the same time, modularity allows shorter lead times and maximum flexibility. System upgrades to customer specifications and budgets can be provided at any time. Without any mechanical modification, it is possible to exchange table tops, replace the slipring capsule to increase the number or type of lines, or increase the position accuracy by changing the encoder. Several solutions with differently sized temperature chambers are available. Temperature chambers can be ordered with the system initially or retrofitted at a later date. The **simex™**ONE series can also be equipped with a manual tiltstand to provide two degrees of freedom. In order to provide the most realistic test conditions, a number of different temperature chambers are available.

Operated via CANopen Bus, the state of the art controller includes two analogue outputs and two analogue inputs.

imex™ONE
, filling the gap

Sascha Revel and Maurus Tschirky, Sales Engineers, ACUTRONIC Switzerland

he Aerospace Testing Expo in Munich and simultaneously at the Automotive

Model	AC1120S	simex™ONE	AC1125
			
Table top diameter	250–350 mm	300–650 mm	300–900 mm
Payload (max)	10 kg (20 kg)	20 kg (40 kg)	100 kg
Payload inertia	0.1 kg/m²	0.5 kg/m²	1 kg/m²
Rate accuracy (over 360°)	0.001%	0.001%	0.0001%
Position accuracy	+/– 15 arc sec	+/– 10 arc sec standard +/– 2 arc sec optional	< 1 arc sec RSS
Position transducer	relative optical encoder with homing	absolute optical encoder	Inductosyn® and Resolver
Controller	industrial	industrial	ACUTROL®3000

Closing the gap between ACUTRONIC's existing single-axis rotary motion tables

The controller offers additional useful features such as position look-up tables, rate and acceleration feed-forward, cogging torque correction, and friction compensation. Plug-and-play software and Graphic User Interface (GUI) are provided on a CD-ROM. USB to CAN adaptors, with drivers and code samples, as well as plug-and-play software are provided. In order to connect the UUTs electrically, a number of different slipring configurations are available.

Closing the gap

The new ACUTRONIC simex™ONE perfectly fits into the well known and field-proven smaller and larger rotary motion tables from ACUTRONIC. As the AC1120S series valuably covers the lower end applications, the AC1125 is laid out for highest precision in combination with high torques. The latter is equipped with the unrivalled ACUTROL®3000 multi-axis digital motion controller. It still offers state-of-the-art system performance and operational features for the motion simulation industry. The table above indicates the main distinguishing features and performance of the respective models.

It is obvious that ACUTRONIC now offers rotary motion tables for the entire range of applications, covering all conceivable configurations.]

Please check **www.acutronic.com** for more technical information.