



The sheer amount of new car designs and the time they spend in development are breathtaking. But to bring new cars to market at ever-shorter intervals, new and innovative test and measurement philosophies are needed.

Climatic car tests and are usually differentiated between climate test-cell measurements and road-based measurements. A distinction which often leads to problems, such as incompatible measurement data, produced by different systems and long set-up times between road and facility-based measurements. In addition, mastery of different systems is necessary. These problems have to be solved to boost the efficiency of tests.

Together with FORD, imc has developed a special climatic measurement concept. It gives due consideration to all requirements of both road-based and climatic wind tunnel measurements. The imc measurement systems CRONOS PL, CANSAS serve as its basis, together with a turnkey software solution.

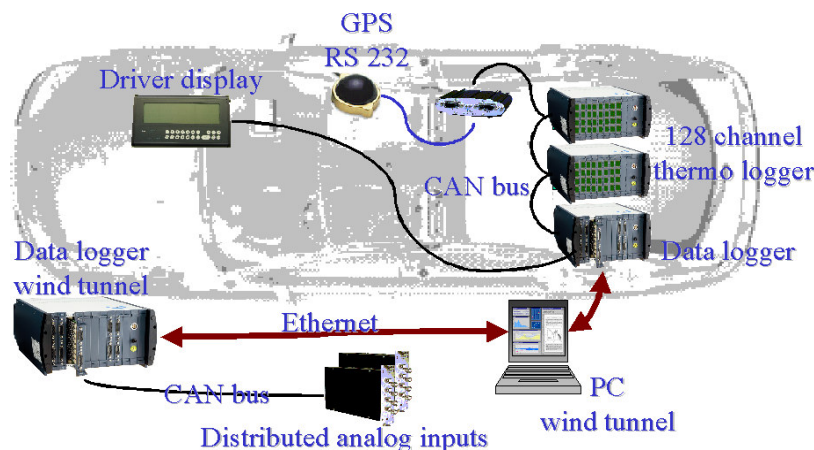


CRONOS PL-8 with 128 temperature channels

Measurement-List No. 1											
Device No.	Ch.	Temperature	Thermocouple Location	Type	K	Y.C.	Datalogger	sec.	Limits (C°)	Thermocouple Location	
								rec	min 1 max 1 min 2 max 2		
4	120029	1	Engine oil	K	201		30				Motorol
5	120029	2	Top hose	K	202		30	20	85		Kühler oben
6	120029	3	Bottom hose	K	203		30				Kühler unten
7	120029	4	In Header	K	109		30			-12	Heizung Ein
8	120029	5	Out Header	K	102		30				Heizung Aus
9	120029	1	RL 1 Fuelroom net	K	63		30				RL 1 Fuelraumnetz
10	120029	2	RL 2 Fuelroom net	K	64		30				RL 2 Fuelraumnetz
11	120029	3	RL 3 Fuelroom net	K	65		30				RL 3 Fuelraumnetz
12	120029	4	RL 4 Fuelroom net	K	66		30				RL 4 Fuelraumnetz

EXCEL databases are the used for the system configuration

The compact and robust system provides a practically infinite number of analog signal inputs (temperature, voltages etc) and is equipped with a synchronized CAN bus interface. A special hardware design allows operation in an ambient temperature range between -40°C and 70°C. The PC-independent systems store their data in a 4 GByte flash card and a 'Personal Analyzer' can be used for statistics, math or analytical online calculations. Therefore, the results are instantly available right after or even during the measurement. A PC or data server connection uses the built-in Ethernet interface or WLAN technology. All further analysis and documentation can be performed with the help of FAMOS, imc's offline analysis tool.



Centralized and decentralized measurement systems can be combined, and a driver display rather than a PC provides the necessary information

