

ISC-HCU-2WD/4WD

Inertia Simulation Controller



This upgrade is a direct replacement for the Horiba BBC Control unit installed on the MDD/LDD machines.

This new controller will provide the ability to test and calculate vehicle losses more effectively while still maintaining the same performance and existing equipment.

The enhanced reliability and future servicability will also be achieved by upgrading to the latest software and control components.

KEY FEATURES ARE:

- HTML BASED REPORTING AND GRAPHICS
- WINDOWS 10 COMPATIBLE
- MICROSOFT SQL SERVER DATABASE BACKEND
- 1066 COMPLIANT



Improving the Environment through Technology

ISC-HCU-2WD/4WD

(Inertia Simulation Controller / Horiba Control Unit)

POC's ISC-HCU-2WD/4WD Next Generation Control unit to provide control software offering automated testing and calibration features. This will improve response, accuracy and utilization without affecting the overall performance of the original machine.

ISC CPU SPECIFICATIONS	
Processor	Intel Atom E3845 Processor
USB Ports	(2) USB 2.0, (2) USB 3.0
Networking	10/100Base-T Ethernet
Mass Storage	SSD Attached storage
Operating System	Debian Linux
Keyboard / Mouse	PS/2
Input power	24VDC \pm 5%
Power Consumption	~30W
Cooling	Fanless industrial PC
Operating Temperature	-20 C /60 C with airflow (SSD)

SIGNAL SPECIFICATIONS	
Analog Inputs	4
A/D resolution	16 bits
Input ranges	\pm 10V
Max Sample Rate	1Khz
Available Signals	(Vehicle speed: 0-10v /0-100mph), (Vehicle force: Fveh to \pm 10v/ 0 to \pm 3000lbs), (Acceleration: 0 to \pm 10v to \pm 10mph/s), (AUX no scaling), (Torque 0 to \pm 10v/ 0to \pm 2,000lbs), (Fpc 0 to \pm 10v/ 0 to FS Command) (Grade: 0 to \pm 10v/sin 45 degree), (Vehicle power: 0 to \pm 3v /0 to \pm 300HP)
Response Time	100ms or less (10% to 90% response to controlled simulation inertial force)
A/D and D/A Calibration	Software calibration
Analog Outputs	2, 16-bit resolution/ 2 additional optionally available.
Output ranges	\pm 10V
Speed Measurement	0-130Mph Resolution/.001 encoder pulse to 25,600 pulses/rev measurement time 10ms. Zero speed detection
Pulse Output	CH1 Roll pulse 5120 pulses/rev



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