

PRESENTATION

The **ICU** (Injector Control Unit) is able to drive up to 18 electronic injectors for internal combustion engines.

It can provide up to 8 injections per injector and per revolution.

It generates TTL pulses to drive injectors. The power part is provided by the IPODs installed inside 8252 or 8319 boxes.

ICU



TYPICAL USE

The **ICU** system generates logical signals to drive up to **6 in standard** and **optional up to 18 injectors**. To transform logical to power signal, it has to be associated to one or more IPODs integrated inside boxes (e.g. EFS 8252 or 8119). More the integration of IPODs, the 8319 module provides a **12 or 24 voltage** (manual settable) battery simulator.

In standard, the ICU drives up to 6 injectors with an **angular resolution of 0.1°** (given by an encoder fixed on the camshaft) or a **temporal resolution of 1 μs**. It drives up to 8 injections per injector and per camshaft revolution.

SYSTEM DESCRIPTION

The ICU case is a 19", 3U height box. This standard format provides an easy integration in standard racks.

The ICU includes :

Input signals :

- 1/rev camshaft.
- N/rev input (with N can take the values from 120 up to 3600 pulses per revolution modulo 120)

These two signals gives the angular position to synchronize the start of each injections.

Output signals :

- "INJ" output for each injector.

The ICU is settable by RS-232 communication link. A software is provided with the instrument. This software sets :

- the number of used injectors.
- the angle or time for each injection start.

APPLICATION EXAMPLE

Simulation of the engine case for test injection.
Replacement of the logical function of a real ECU.

TECHNICAL SPECIFICATIONS

Power supply	230V/50Hz or 115V/60Hz
2 inputs (1/R and N/R)	BNC plug
E/S logical level	BNC plug
E/S RS 232	Sub-D (9 pins)
Communication protocol	ASAP 3
Angular resolution	0,1°
Timing resolution and accuracy	1µs
Dimensions	3U/84TE/19"
Display	color LCD ¼ VGA
Keyboard	Tight keyboard IP65 16 keys



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Order reference

ICU