



AVL AMPLIFIERS AND SIGNAL CONDITIONING

IGNITION TIME MODULE 380

IGNITION PULSE SENSOR AND CONDITIONING UNIT

The Ignition Time Module 380 is a one-channel conditioning unit for measurement of ignition signals on spark-ignited engines. The digital output signal fully complies with combustion analysis standards in terms of quality and accuracy.

Function

The module is delivered with a compact inductive current pick-up which can be clamped onto the high-voltage cable of the cylinder to be measured. If lack of space prevents the usage of the pick-up the Ignition Time Module can also detect and process lower-voltage signals coming for instance from the ECU, making the Ignition Time Module suitable for any type of ignition systems.

The device requires no parameterization, and independently from the amplitude of the input signal the Ignition Time Module delivers the same precise pulse information via a standard TTL output. The user can freely choose between low or high pulses via a jumper-switch.

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Technical Data / Product Name

IGNITION TIME MODULE 380

GENERAL	
Number of channels	1
Dimensions LxWxH	115 x 80 x 35 mm
Temperature range	-40°C...+60°C (-40°F.....+140°F)
Power supply	Via LVDS on AVL indicating unit, or via standard 5 V DC power supply (not included)
INPUT SIGNAL	
Minimum duration	0.1 ms
Type and voltage	Pulse-shaped signal between 1 V and 49 V
OUTPUT SIGNAL	
Duration	1.4 ms
Amplitude	approx. 5 V
Type	TTL high or low pulses

Scope of supply

- Ignition Time Module 380
- Inductive current probe
- Power supply cable for LVDS by-pass
- BNC output cable

Summary

- Robust design and easy operation
- Compatibility with most ignition systems
- Standard TTL output

Application range

The Ignition Time Module 380 is flexible and robust, and can therefore be used as standard conditioning unit for measurement of ignition timing on any kind of test bed.

The device should be used in combination with a combustion analysis system, where the ignition pulse is converted into an ignition timing in [°CA], thus delivering crucial information to engine developers and calibration engineers.



Ignition Time Module & inductive pick-up