

ORDELA MODEL AIM-208 TIME-INTERVAL DIGITIZER

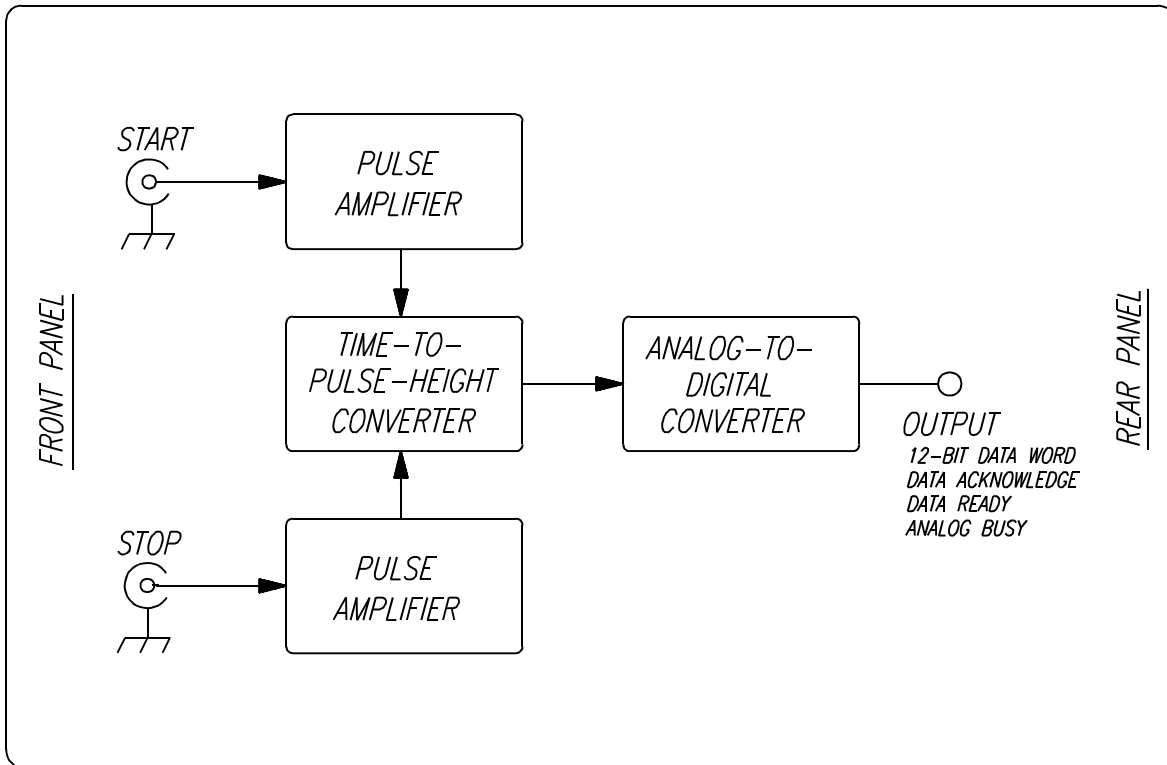
DESCRIPTION

The ORDELA Model AIM-208 Time-Interval Digitizer is an electronic module designed for optimum processing of the timing signals from an ORDELA Model AIM-204-A Dual Timing SCA. The AIM-208 is packaged in a single-width Nuclear Instrument Module (NIM) and includes the following functional circuits:

- S One TIME-TO-PULSE-HEIGHT CONVERTER (TPHC) to provide an output signal having an amplitude proportional to the time interval between START and subsequent STOP input pulses from an AIM-204-A or similar instrument. The optimum ranges of Conversion Gain and Time Offset are selected and set at the factory for operation with a specific Model AIM-204-A.
- S One 12-Bit ANALOG-TO-DIGITAL (A/D) Converter to digitize the amplitude of each TPHC output pulse and provide a 12-bit representation of the corresponding time interval (and hence of the spatial coordinate).

SPECIFICATIONS

INPUTS:	START and STOP - Two front panel BNC connectors with 50-S input impedance accepting fast NIM pulses (-16 mA, 10 ns wide).
OUTPUTS:	One rear-panel, 25-pin "D" connector carrying the 12-bit dataword, a 1-bit DATA ACKNOWLEDGE input, a 1-bit DATA READY output, and a 1-bit ANALOG BUSY output. All digital signals are TTL compatible.
CONTROLS:	EXPANSION and SHIFT - Two 11-turn, precision potentiometers on the front panel controlling the Conversion Gain and the Time Offset, respectively.
POWER:	± 6 V @ 660 mA, ± 12 V @ 160 mA, and ± 24 V @ 80 mA
SHIPPING WEIGHT:	1.5 kg
DIMENSIONS:	3.4-cm-wide by 22.1-cm-high, by 24.6-cm-long



ORDELA MODEL AIM-208 CIRCUIT DIAGRAM

WARRANTY

ORDELA, Inc. warrants its products to be free from defects in materials and workmanship for 12 months after shipment. No other warranty is included. Specifically, no warranty of merchantability or fitness for a particular purpose is implied. ORDELA's liability under this warranty is limited to repairing or replacing the product at ORDELA's option. This warranty is void if the product is operated improperly, disassembled, or modified other than in the ORDELA laboratory.