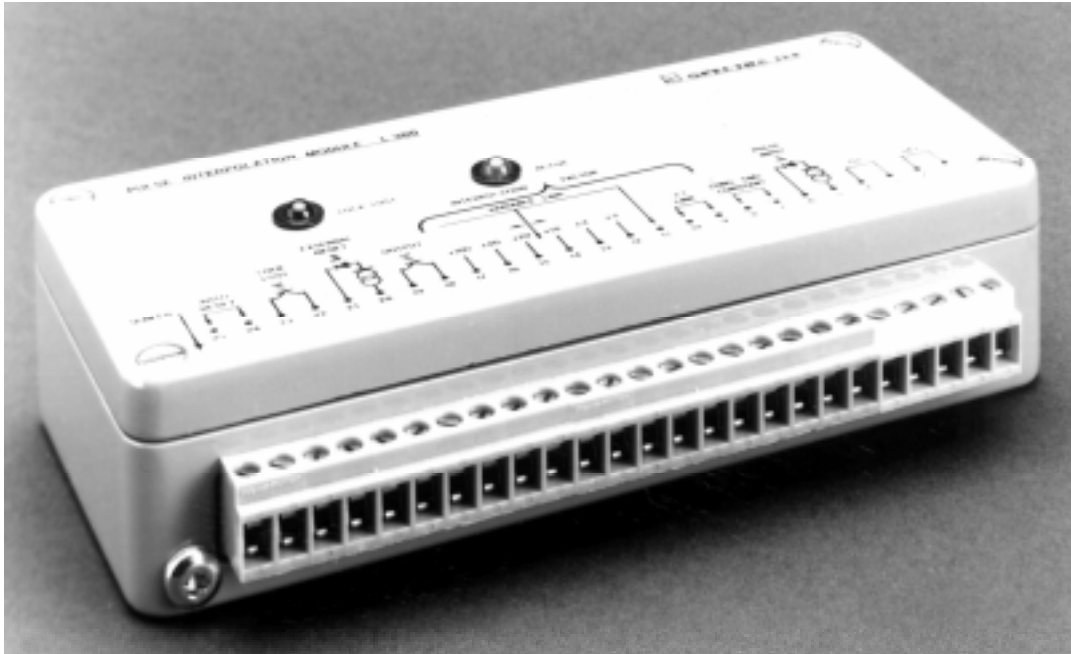


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Pulse Interpolator Module

PIM



FEATURES

- ▶ **Phase-locked loop frequency multiplier.**
- ▶ **Interpolation factors externally selectable in the ranges times 1, 2, 4, 10, 20, 40 & 100**
- ▶ **Capture and lock in frequency range in excess of 1000 to 1.**
- ▶ **Phase lock failure signal.**
- ▶ **Inputs and outputs with TTL compatible signal levels.**
- ▶ **Input pulse signals amplitude 3V to 25V.**
- ▶ **Extendable time constant for slow pulse streams.**

PIM - PULSE INTERPOLATOR MODULE

The Pulse Interpolator Module (PIM) uses a phase-locked loop interpolator to scale up pulse signals. The scaling factors which range from x2 to x100 are selected by external links. It is particularly useful where resolution is inadequate because only whole pulses can be counted. Useful applications include low frequency flow meters and compact provers.

The Pulse Interpolator Module (PIM) uses the well established technique of phase-locked loop interpolation to generate an output frequency which is an exact multiple of the input frequency. By linking the connections externally the multiplying factor can be selected. The choices are 1, 2, 4, 10, 20, 40 and 100 times the input frequency.

Pulse inputs, which are opto-isolated, can be of any amplitude between 3 and 25 Volts. Incoming frequencies can range from 10Hz to 2kHz. The phase-locked loop can capture and lock a frequency range of up to 1000 to 1, but if lock should not occur a signal is generated indicating "lock lost".

The unit can be configured to automatically reset the lock lost alarm when re-lock occurs or it can be reset externally. The output is opto-isolated and can sink up to 10mA at TTL levels. Protection against reverse biasing is included.

The unit is housed in a die-cast box for back-of-panel mounting in a safe area. It is powered by a 8-30V dc power supply which is fully isolated from both inputs and outputs. Supply current is less than 25mA.

PIM SPECIFICATION

Inputs:	3-25 volts opto-isolated, sine, square or triangle wave 10Hz to 2kHz.
Power Supply:	8-30V dc fully isolated. 25mA current.
Outputs:	TTL logic levels opto-isolated. 10Hz-200kHz. Phase lock and pulse reset optoisolated.
Size:	150mm x 65mm x 35mm.
Weight:	0.45 kg
Sales Code:	PIM

Further Information

Further information on any Spectra-Tek products may be obtained from our Sales Offices shown below or from any of our Distributors and Sales Representatives world-wide

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