PYRAGON, INC.

ACM-TA-4005-P.1 Adder/Subtractor Station

Power	120 VAC, +/- 10% 8 VA
Operating Temp	0-50 C (32-122 F)
Relative Humidity	0-95%
Input Signal	Four (4) 4-20 mA
Output Signal	4-20 mA
Max Output Load	1500 ohms
Seismic Approval	Category B
Transient Immunity	OH A28M-1982 1000 Vpeak
RFI Immunity	OH C5047-77
Accuracy	+/- 0.25%
Isolation	1000 Vac, input vs output vs power
Drift	Short term +/- 0.05% LongTerm +/- 0.1%

ACM-TA-4005-P.1 Adder/Subtractor Station

The ACM-TA-4005-P.1 is a direct form, fit and function replacement for the AGM model ACM-TA-4005. This four channel station accepts up to four (4) analog inputs and provides one(1) analog output. Each input on this adder/subtractor can be configured for either addition or subtraction. There is also a K factor for each input with a range of 0.1 to 3.8. This can be used to weigh each input with a gain factor. This capability results in the following formula Output = ±KIn1 ±KIn2 ±Kin3 ±Kin4.

This new design has several performance enhancements. The ACM-TA-4005-P.1 has 3 way input-output-power isolation as well as input to input isolation. It has an electrical transient protection circuit on the input and output signal lines as well as the power line. The power supply is a very efficient switching power supply which uses only one electrolytic capacitor as compared to the original unit which had a linear supply with multiple electrolytic capacitors. Additionally the circuit is designed with a low temperature coefficient giving the unit good long term stability requiring reduced calibration maintenance