

DECKBLATT ZUM ORIGINAL-DOKUMENT DES HERSTELLERS

DELTA | DATENBLATT OPTIONEN

HERSTELLER

Delta Elektronik BV

PRODUKTSERIE

Trennverstärker ISO AMP für ES-, SM800-,
SM1500-, SM6000-Serie

Ihr direkter Ansprechpartner für Delta-Produkte!

Die Ing. Erhard Fischer GmbH ist Ihr zuverlässiger Partner für die Produkte von Delta Elektronik BV. Wir bieten Ihnen nicht nur hochwertigen technischen Support, sondern auch kompetente Beratung und maßgeschneiderte Lösungen für Ihre individuellen Anforderungen.

Ob Standardprodukt, kundenspezifische Geräte oder Schaltschrankbau. Wir freuen uns, Sie bei Ihrer Lösungsfindung mit eingehender Kundenberatung kompetent unterstützen zu können.

Kontaktieren Sie uns für technische Beratung oder ein individuelles Angebot!

Wir freuen uns auf das Gespräch mit Ihnen.



IHR ANSPRECHPARTNER

Martin Sochor



+43 2236 42694-40



powersupply@ing-fischer.at



Ing. Erhard Fischer GmbH



Weissenbach 101 | AT-2371 Hinterbrühl



www.ing-fischer.at



ING. ERHARD FISCHER GMBH

**Immer die passende Lösung für Industrie-
Stromversorgungen, Heizfolien & Messtechnik**



Card for inserting in power supply



External Module



ISO AMP - Four channel analog isolation amplifier

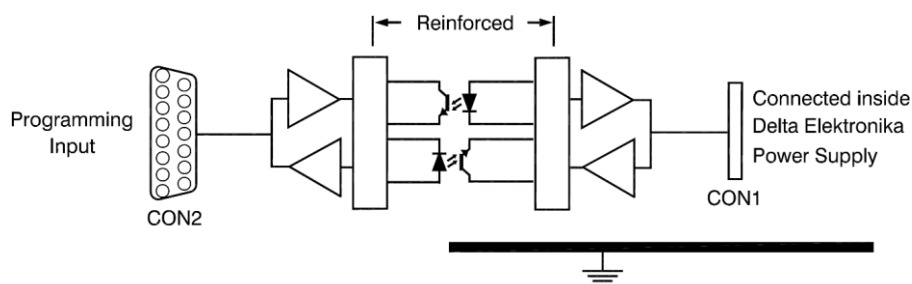
Features

- Selectable 0-5 V and 0-10 V signal levels
- Isolated programming and monitoring of U, I and status signals
- Prevents problems with earth loops and CM-voltages
- Pin compatible with ES-series, SM800, SM1500 and SM6000
- Factory installed
- Negative current programming and monitoring in case of optional power sink

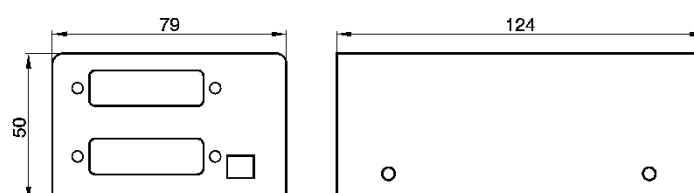
Specifications

- Programming and monitoring offset : +/- 60 μ V typical
- Full scale error : 0.1% calibrated (10% for negative signals)
- Non-linearity : 0.01% typical, TC = 65ppm/ $^{\circ}$ C
- Common mode rejection : 80 dB @ 50 Hz

Block diagram



Dimensions External Module



Specifications

CON 1 - internal circuitry : To plug the card inside the power supply (20P header connector)

CON 2 - external connections : To connect the card to a programming source (15P female D-connector)

Analog inputs / outputs: CV, CC programming and CV, CC monitoring

Offset		: $\pm 60 \mu\text{V}$ typical, $\pm 180 \mu\text{V}$ max.
Full scale error		: 0.1% calibrated.
Non-linearity		: 0.01% typical, 0.05 % max.
Temperature coefficient		: -65ppm typical
Common mode rejection		: 80 dB @ 50 Hz
Voltage range :	CON 1	: 0 - 5 V
	CON 2	: 0 - 5 V or 0 - 10 V selectable
Input impedance	CON 1	: 200 k Ω
	CON 2	: 200 k Ω for 5 V input, 400 k Ω for 10 V input.
Output impedance	CON 1	: 100 Ω / max. 4 mA
	CON 2	: 1 Ω / max. 4 mA
Reference voltage		: 5.114 V ± 15 mV (Ro = 10 Ω / max. 4 mA), TC = 20 ppm/ $^{\circ}\text{C}$
Auxiliary supply voltage		: 11.4 - 12.7 V / Ri = 470 Ω

Digital status outputs : CV, LIM, OT, ACF, DCF

Output voltage	CON 2	: + 5 V / max. 2 mA
Output impedance	CON 2	: 5 Ω

Digital input : Remote shutdown

Input voltage	CON 2	: 3 - 15 V
Input impedance	CON 2	: 1.8 k Ω

General

Temperature:	Operating temperature -20 to $+50$ $^{\circ}\text{C}$, Storage temperature -40 to $+70$ $^{\circ}\text{C}$.
Humidity:	Max. 95% RH, non condensing, up to 40 $^{\circ}\text{C}$, max. 75% RH, non condensing, up to 50 $^{\circ}\text{C}$.
Insulation:	CON2 - CON1, 1000 VDC Reinforced insulation acc. IEC60950-1 / EN61010-1 CON2 - Case, 60 VDC Functional insulation
Insulation test voltage	4250 VDC
Capacitance input / case	3.2nF

External ISO AMP MODULE

Enclosure

Dimensions (h x w x d) = 50 x 79 x 124 mm
Weight 0.5 kg
Degree of protection: IP20

Insulation

Analog in- and outputs to case: 60 VDC
Logic in- and outputs to case: 60 VDC
Line input to case: n.a.

Input Power

Rated voltage 24 VDC. Wide range 15 - 30 VDC
Power consumption 3 W
Uses 2pole terminal block for DC input power.
Uses 15P male & female connectors for prog. signals.

EMC

Emission : EN 61326-1, class B equipment (for use in domestic establishments)
Immunity : EN 61326-1, equipment for use in industrial and domestic establishments

Accessories

The following is supplied with the ISO AMP MODULE:

Rail adapter for 35mm rail mounting, Wall mounting adapter (7.5 * 8cm) and 60cm cable with 15 pole D-connectors.

Note1:

The four analog channels are factory-calibrated within 0.1 % for 5 V input and output voltages. Selecting a 10 V input and/or output without re-calibrating can introduce an extra full scale error of 0.1 %. Offset, full scale error, non-linearity and temperature coefficient have to be added to the specifications of the power supply.

Note2:

Specifications are measured at an ambient temperature of 25 $^{\circ}\text{C} \pm 5$ $^{\circ}\text{C}$ unless otherwise noted.

Ordering Information

Models	Order Code
SM800 with built-in card	Option P249
SM1500 with built-in card	Option P218
SM6000 with built-in card	Option P154
External Module	ISO AMP Module