imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Inline analog input terminal, without accessories, 8 inputs, 0-20 mA, 4-20 mA, ±20 mA, 0-10 V, ±10 V, (also 0-40 mA, ±40 mA, 0-5 V, ±5 V, 0-25 V, ±25 V, 0-50 V), transmission speed 2 Mbaud, 2-conductor connection method

The illustration shows version IB IL Al $8/{\rm SF}$

Product description

The analog Inline input terminals are suited for connecting conventional sensors for the acquisition of current and voltage signals.

- Particular features of the modules are:
- High accuracy of measurement
- Extremely rapid acquisition of measurement values
- Excellent noise suppression and common mode rejection, and
- Measurement value acquisition with a resolution of 16 bits

It goes without saying that you also have advantages in handling with the analog Inline input terminals, such as multi-wire connection or the automatic contact with the grounding conductor when the terminal is snapped onto the DIN rail.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack strip for labeling the terminal points.

Product Features

- 8 analog single-ended signal inputs for the connection of either voltage or current signals
- ☑ Connection of sensors in 2-wire technology
- Measured values can be represented in five different formats
- ☑ 16-bit analog/digital converter
- Diagnostic and status indicators
- From hardware version 02, approved for use in potentially explosive areas of zone 2



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	156.7 GRM
Custom tariff number	85389091
Country of origin	Germany



Technical data

Note

area

Dimensions

Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm

Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
Ambient temperature (storage/transport)	-25 °C 85 °C
Permissible humidity (operation)	10 % 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % 95 % (according to DIN EN 61131-2)
Air pressure (operation)	70 kPa 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

General

Weight	213 g
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic), 24 V supply U_{ANA} / I/O 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic), 24 V supply $U_{\mbox{\tiny ANA}}\mbox{/functional earth ground 500 V}$ AC 50 Hz 1 min
	I/O / functional earth ground 500 V AC 50 Hz 1 min

Interfaces

Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	2 MBit/s
Transmission physics	Copper

Inline potentials

Communications power U _L	7.5 V DC (via voltage jumper)
Current consumption from U_L	max. 85 mA
	typ. 68 mA



Technical data

Inline potentials

I/O supply voltage U _{ANA}	24 V DC
Current consumption from U _{ANA}	max. 38 mA
	typ. 24 mA

Analog inputs

Number of inputs	max. 8 (single ended)
Connection method	2-wire (shielded)
Input name	Analog inputs
A/D conversion time	approx. 10 µs
Limit frequency (3 dB)	3.5 kHz
Data formats	IL, IB ST, IB RT, standardized representation, PIO format
Measuring principle	Successive approximation
Measured value resolution	16 bits (15 bits + sign bit)
Measured value representation	16 bit two's complement
Current input signal	0 mA 20 mA
	4 mA 20 mA
	-20 mA 20 mA
	0 mA 40 mA
	-40 mA 40 mA
Voltage input signal	0 V 5 V
	-5 V 5 V
	0 V 10 V
	-10 V 10 V
	0 V 25 V
	-25 V 25 V
	0 V 50 V
Number of inputs	8 (single-ended voltage inputs)
Voltage input signal	0 V 5 V
	-5 V 5 V
	0 V 10 V
	-10 V 10 V
	0 V 25 V
	-25 V 25 V
	0 V 50 V
Input resistance of voltage input	> 240 kΩ 0.01 %
Number of inputs	8 (single-ended current inputs)
Current input signal	0 mA 20 mA
	4 mA 20 mA

10/20/2014 Page 3 / 5



Technical data

Analog inputs

	-20 mA 20 mA
	0 mA 40 mA
	-40 mA 40 mA
Input resistance current input	25 Ω 0.01 %

Classifications

eCl@ss

eCl@ss 4.0	27250303
eCl@ss 4.1	27250303
eCl@ss 5.0	27250303
eCl@ss 5.1	27242601
eCl@ss 6.0	27242601
eCl@ss 7.0	27242601
eCl@ss 8.0	27242601

ETIM

ETIM 2.0	EC001431
ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 5.0	EC001596

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

Approvals

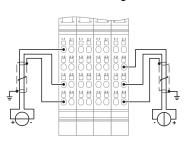
Approvals

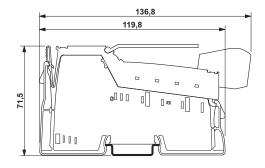
Approvals

UL Recognized / cUL Recognized / cULus Recognized



Approvals	
Ex Approvals	
ATEX	
Approvals submitted	
Approval details	
UL Recognized	
cUL Recognized	
Drawings	
Connection diagram	Dimensioned drawing





Phoenix Contact 2014 © - all rights reserved http://www.phoenixcontact.com

10/20/2014 Page 5 / 5