

Data Sheet | SG-Amplifier Series CFA225-P

Carrier Frequency
5V; 225 Hz



Applications | Key Facts

- ▶ Main applications: Single channel measurement, test and calibration tasks of strain gauge based transducers e.g. force sensors, or torque transducers
- ▶ Precision carrier frequency strain gauge measuring amplifier | CF 5V; 225 Hz | strain gauge full bridge 180 Ω - 5 k Ω
- ▶ Highly precise and reliable measurement results | accuracy class: 25 ppm
- ▶ Handy & compact design
- ▶ Intuitive operation via keypad and illuminated display or USB-C interface
- ▶ Perfectly suited for mobile but also stationary use
- ▶ Portable use with external PowerBank via USB connection possible
- ▶ Excellent for reference measuring chains

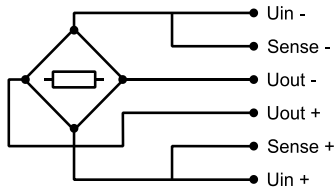
Options | Accessories

- ▶ Wall mount included
- ▶ Table stand included
- ▶ Shock protection included
- ▶ Transport case included

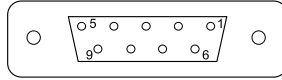
Technische Daten

Metrological Data	Accuracy class	ppm	25
	Nonlinearity	ppm	±5
	Reproducibility	ppm	±5
	Temperature drift: Zero point sensitivity	ppm/K ppm/K	< ±5 < ±5
	Drift after 1 h when switched on		
	Short time drift (10 min.)	ppm	< ±10
	Long time drift (24 h)	ppm	< ±20
Long term stability	ppm/a	< ±25	
Sensor connection	Connector		9-pin Sub-D female
	Connection technique		6-wire
	Max. recommended cable length to sensor standard measuring cable pairshielded cable	mm	5 (0,25 mm ²) 50 (0,25 mm ²)
	Sensor type		Strain gauge full-bridge
	Bridge resistance	Ω	180 ... 5000
	Input signal Range	mV	±15
	Maximum input voltage	V	6
Excitation voltage		5 V / 225 Hz	
Signal processing	Filter characteristic	ms	Sinc ⁴ low-pass
	Maximum resolution		±300.000
	Noise (3σ-value)	ppm	±5
Miscellaneous	Supply voltage 1. mains operation 2. USB operation 3. battery operation		1. 230 V / 50 Hz 2. 5V @ USB2.0 3. 4.5 V; 3 x AA
	Operating time in battery mode	h	ca. 5
	Connection to PC		USB-C
	Protection (DIN EN 60529)		IP50
	Rated temperature range	°C	15...30
	Operating temperature range	°C	0...40
	Dimensions (W*H*D)	mm	95 * 200 * 40
Weight	kg	appr. 0.3	

Transducer connection



Connection
pluggable¹⁾
9-pin Sub-D
female



Connection		Pin
Supply voltage (+)	U_{in+}	2
Supply voltage (-)	U_{in-}	3
Measurement signal (+)	U_{out+}	5
Measurement signal (-)	U_{out-}	9
Sense (+)	Sense+	6
Sense (-)	Sense-	7
Shielding		Housing

1)View too weldingside

Order Numbers | CFA225-P

Description	Order number
Precision strain gauge amplifier CFA225-P series CF 5 V; 225 Hz portable	S-CFA225_P-H2-F2

Note:

Wall mount, table stand, shock protection, power supply and transport case are included

Order Numbers | CFA225-P | Accessories

Description	Order number
Measuring cable	
Configurable double shield measuring cable yellow 5 m double shielded and twisted in pairs outer sheath Ø 6.5 mm 6-wire technology transducer connection: straight connector type LEMO 7-pin push-pull cable end measuring amplifier: D-Sub 9-pin	C-CAB-DMC-LE7S-05M-DS9
Notes: <i>Measuring cable may be included in the scope of delivery of the transducer. Other lengths e.g. 3 m, 10 m also available.</i>	
Table Stand	
Table stand for measuring amplifier series CFA225-P	S-TS-CFA225_P
Transport case	
Transport case with foam insert for a CFA 225-P and accessories	S-TC-CFA225_P
Power supply as of Hardware Revision 2 (H2)	
Power supply Hardware Revision 2 only (S-CFA225_P-H2-F1) standard EU connector to USB-C 5 V; 1.5A (max.); 7.5W	S-PS-CFA225_P

Subject to change without notice. All information describes our products in general terms. They do not represent agreed quality in the sense of § 434 Para. 1 of the BGB (German Civil Code). Illustrations may differ from originals.



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