Specifications SHERLOG

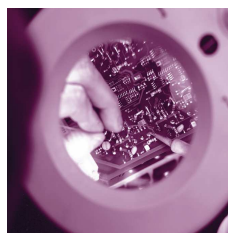|		
System concept		A modular, high-accuracy digital fault recorder (DFR) with an integral power quality analyser designed to comprehensively monitor power equipment such as lines, busbars and associated protection devices and switchgear equipment. SHERLOG systems are fully constructed using 32/128 bit DSP technology. All measurement and monitoring functions are freely configurable via the software.
Analog inputs	Frequency range	DC to 6 kHz, linear frequency response
	Resolution	16 bit
	Error	<0.1%
	Measuring ranges	User-definable measuring ranges from 100 mVAC to 400 VAC
		Current measurement via external shunts or current clamps
	Protection	Galvanic isolation via opto-couplers (LOC), phase-to-phase and phase-to-earth > 2.5 kV
Binary inputs	Activation range	24 to 300 VDC single range
	Protection	Transient protection, polarity protection and galvanic isolation via opto-couplers
Binary outputs	Sw. capacity	220 VDC, 2 A, 60 W, resistive load
	Protection	Potential-free and galvanically isolated output relays
Triggers		All definable analog and binary triggers can be activated at the same time and for all channels.
	Analog signals	Programmable thresholds for over-, under- and rate-of-change triggers for voltage, current, phase angle, frequency, THD, harmonics, power factor, zero/pos/neg sequence, impedance, P_{ST}, P_{LT} and other power quality values.
	Binary signals	Rising or falling edge
Recording time	Static recording time	User-definable recording time for pre-fault, fault and post-fault time
	Dynamic recording time	User-definable recording time for pre-fault, min. fault, max. fault and post-fault time
		Within the configured limits, the length of the fault record is dependent on the real fault duration. The pre- and post-fault times have a fixed length.
	Storage capacity for fault records	The maximum recording time depends on the selected sampling rate.
		E.g. 400 records of 2 seconds with 2000 Hz
	Storage capacity for continuous, trend and PQ recordings	Up to 6 months, depending on memory space and the recording parameters selected.
Sampling rate		Two fast sampling rates (100 Hz to 30 kHz) can be adjusted in steps of 1Hz and can be used simultaneously
		One slow sampling rate (1Hz to 120Hz)
Analysis		Automatic fault location, COMTRADE data import and export, multiple channel and record superimposition, comprehensive mathematical functions for the creation of virtual channels, analysis up to the 50th harmonic, flicker calculation according to EN 60868, class A power quality analysis according to EN 50160 and IEC 61000-4-30

KoCoS
A FRIEND OF ENERGY

Complete system	Operation, system control, data storage and evaluation using a standard, external Windows PC.
User interface	NRGCenter software package for operation under Windows® 2000/XP
Power supply	Rated voltage 85 to 265 VAC, 47 to 63 Hz, 90 to 350 VDC UPS option for approx. 20 minutes
	DC power supplies for 19 to 36 VDC or 60 VDC are available as an option
Connections	All connections for analog and binary signals are located on the rear panel. Communication ports are located on the front and rear panel.
Interfaces	2 x RS232, 1 x USB connection Optional: RS485, fibre-optic RS232, electrical and fibre-optic Ethernet (qualified for IEC61850 networks), internal or external modem
Internal clock accuracy	15 ppm
Time synchronisation	DCF, GPS, external pulse
Data memory	16 MB SDRAM, 32 MB Flash RAM per 8 analog channels (SHERLOG CRT & CX)
	16 MB SDRAM, 32 MB Flash RAM in total (SHERLOG C8, P8, C16, P16)
Keyboard	Membrane keypad on the front panel
Display	Alphanumeric LC-Display with 4 x 20 characters
Status indication	8 status LEDs on the front panel
Environment	Operating temperature 0 to 50°C Storage temperature -20 to 60°C Relative humidity 5 to 90%, non-condensing Protection IP20 Safety standard EN 61010-1 300 V~CAT II EMC emissions EN 50081-2 industrial Susceptibility EN 50082-2 industrial Certification Optional DKD calibration certificate

Product specifications

	SHERLOG P8	SHERLOG P16	SHERLOG C8	SHERLOG C16	SHERLOG CRT	SHERLOG Cx
Analog inputs Total number per 3HU	8	16	8	16	8 or 16	up to 32
Current measurement	Internal CTs	Internal CTs	Internal CTs	Internal CTs	Internal shunts or CTs	External shunts or CTs
Binary inputs Total number per 3 HU	12[2]	20[2]	12[2]	20[2]	16 or 32 +4[2]	up to 128 (192)[1]+4[2]
Binary outputs Total number per 3 HU	4	4	4	4	4	up to 36
Internal UPS	□	□	□	□		
Display Alphanumeric LC-Display	4x20 characters	4x20 characters	4x20 characters	4x20 characters	4x20 characters	4x20 characters
Status display	8 LEDs	8 LEDs	8 LEDs	8 LEDs	8 LEDs	8 LEDs
Keyboard	■	■	■	■	■	■
Max. sampling rates	12.8 kHz	12.8 kHz	12.8 kHz	12.8 kHz	37.5 kHz	37.5 kHz
Power Quality Analysis	□	□	□	□	□	□
Housing	½ 19", 3 HU portable	½ 19", 3 HU portable	½ 19", 3 HU drawer	½ 19", 3 HU drawer	19", 3 HU drawer	19", 3 HU drawer
Weight	2.0 kg	2.2 kg	2.0 kg	2.2 kg	3.0 kg	3.0 kg

■ Standard   □ Optional

[1] With galvanic isolation in groups of 8
[2] With galvanic isolation in groups of 4

www.kocos.com   Doc. 7610093 Rev. 1.60

Technical specifications subject to change without prior notice |
©06/2010 KoCoS Messtechnik AG
WINDOWS® is a registered trademark of the Microsoft Corporation.

KoCoS
A FRIEND OF ENERGY