

SCPC *Cathodic Protection Criteria*

In situ assessment of marine structures cathodic protection need in deep sea or harbour



Data loggers



SCPC provides in situ the value of **current density** necessary to protect an **immersed metallic structure**.

It allows to determine the characteristics of the cathodic protection needed: size, number of sacrificial anodes, power supply.

Current density depends on the **environmental parameters** (dissolved oxygen, marine currents, temperature) which influence electrochemical reactions on the surface of the structure to protect.

The originality of SCPC lies in the fact that the **instrument housing is made of the tested alloy**.

Easy to deploy:

- Light and compact, no external wire
- Fast wireless configuration and data collection thanks to a communication interface (**Inductive Data Pencil**) connected to the USB port of a PC using **Winmemo** software

nke

INSTRUMENTATION

www.nke-instrumentation.com



SCPC *autonomous data logger*

Determining cathodic protection criteria



The system consists of:

- a zinc reference electrode
- a sacrificial anode: aluminium indium / other on request
- a cathode (the metal to be protected)

SCPC is available with 2 different standard housings: steel and stainless steel.

DESIGNATION		SCPC
Order reference		60-07-040 5 shunts available : 22, 44, 66, 88 ou 110Ω By default
Voltage	Range Resolution Accuracy (linearity, hysteresis, repeatability) Input impedance of the measurement stage	± 1V < 1mV < 10mV > 10 ^E 11Ω
Current	Range Resolution Accuracy (linearity, hysteresis, repeatability) Input impedance of the measurement stage	30µA à 10mA < 3µA < 50µA > 10 ^E 11Ω
Sampling rate		Programmable from 0.01 second to 99 hours
Autonomy	Memory Energy	> 3 years recording at 1h 3 replaceable Lithium batteries
Mechanical features	Max. operating rate Operating temperature Dimensions Weight in air	300 bars 0 to +30°C Housing Ø 40 x 274 mm 950 gr

Examples of use of SCPC

- In situ assessment of cathodic protection of marine structures (deep sea, harbours ...)



Pictures by ACCOAST and nke Instrumentation

nke
INSTRUMENTATION



Sales department
Tel : +33 (0)2 97 36 41 31 - Fax : +33 (0)2 97 36 55 17
info.instrumentation@nke.fr
www.nke-instrumentation.com

