

CP Micro – Impressed Current Cathodic Protection

Issue 1 Date: 10/06/2021



- The CP Micro power modules are ideal high impedance coated structures
- 12V 4mA
- In-built interrupter supplied as standard
- Ultra-low output current
- Constant Voltage, current and potential control modes
- Optional upgrade for remote monitoring and control
- Simple to use multi-functional display
- Parallel solutions for higher outputs with hot swappable power modules
- Switch mode power supplies allowing control of all outputs

INPUT

AC Voltage	: 230VAC (85-264) Single Phase
Current	: 150mA rms maximum at 85VAC
Frequency	: 45 – 66Hz
Power Factor	: >0.4
Inrush current	: <8A peak at nominal mains voltage
Soft start	: power on ramp-up time <5 secs
Protection	: Surge protection varistors : Inrush current limiting circuit

OUTPUT

Output	: 12V : 4mA
Voltage range	: 10mV to 12V (10mV steps)
Current range	: 40µA to 4mA (1µA steps)
Potential range	: 0V to -5V structure wrt ref cell
Ripple	: <2mV
Dynamic Resp.	: Set point change controlled by software ramp

PROTECTION

Input	: Surge protection varistors : Inrush current limiting circuit : 500mA Internal fuse (Slow blow)
Output	: Surge suppression on line : EMC filtering
Over temp.	: Output power reduced

INDICATORS AND ALARMS

All Alarms are indicated by an LED. Relay contact/closure and/or digital comms to external monitoring

Mains fail	: Always active
High temperature	: Always active
Low output volts	: User select/program
High output volts	: User select/program
Voltage out of range	: User select/program
Low output current	: User select/program
Under protection	: User select/program

SYSTEM OPERATION

- Constant potential mode
- Constant current mode
- Constant voltage mode
- Interrupter mode (standard)
- User programming module
- Digital metering

COMPLIANCE

Safety	: IEC 60950
EMC	: EN55081-2 : EN55082-1

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MECHANICAL

Size; Can be provided in a variety of cabinets and enclosures, to meet client requirements.
Painted Mild Steel
GRP

Weight : Dependent on enclosure and power requirements

ENVIRONMENTAL

Cooling : Natural Convection
Temperature : -20°C to +55°C operational
: -40°C to +70°C transport/storage
Relative Humidity : 0-90% non-condensing
Altitude : to 3,000 metres

INTERFACES

Main power input : Single-phase line connection
Main power output : Anode drive (wrt Structure)
Potential Input : For connection to reference cell
Discrete Control : For external shutdown
Options modules : For system enhancement

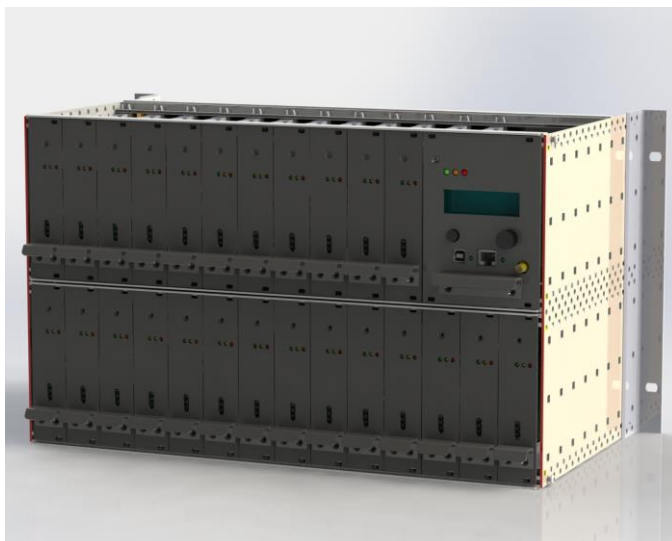
OPTION MODULES/UPGRADES

GPS : For Interrupter synch
EEPROM : Expansion module
USB Port : For local communication
TCP/IP : For remote communication
GSM * : For remote communication
SMS * : Remote Alerts
*2 years standard SIM contract

SINGLE CP Micro INSTALLATION – 12V 4mA



Multizone CP Micro INSTALLATION – 12V 4mA



CUSTOM BUILT SOLUTIONS

We are able to supply custom-built systems with higher current outputs, alternative voltages, multiple zones and a range of different enclosures.