



Unit 14, The Bridge, Beresford Way
 Chesterfield, Derbyshire, S41 9FG, UK
 T e l : + 44 (0) 1246 452909
 F a x : + 44 (0) 1246 452942
 W e b : w w w . e t p s . c o . u k
 E m a i l : s a l e s @ e t p s . c o . u k
 S a l e s : 0800 612 95 75

CPS

High Voltage Modules

Description

The CPS are high voltage power supplies with a variety of outputs ranging from 500V to 30kV. Rated between 9-12W these units provide a very stable output with low ripple and noise. There is a choice of 12Vdc or 24Vdc input for all modules up to 7kV. The output voltage and current limits are set over the analogue interface. The V & I values can also be monitored and the output enabled. As standard the CPS units are built into compact metal cases with the output provided via a 600mm bare ended HV cable. Different lead lengths and output connectors such as SHV and CPE can be provided on request. If rack mounting is required then the modules can be optionally built as 3U high cassettes. Up to 10 cassettes can be slotted into a single AC powered rack. For remote control these multi channel systems can be built with a CAN interface.



- Available in 3U cassette or compact box
- Can be used in THQ & MMC Series
- High voltages up to 30kV
- Stable output voltage
- Very low EMI

Selection Table

Part Number	Maximum Power	Input Voltage	Output Voltage	Output Current
CPx 05 206 24 5	10W	24 V	0.5 kV	0 - 20 mA
CPx 05 206 12 5	10W	12 V	0.5 kV	0 - 20 mA
CPx 10 106 24 5	10W	24 V	1 kV	0 - 10 mA
CPx 10 106 12 5	10W	12 V	1 kV	0 - 10 mA
CPx 15 805 24 5	12W	24 V	1.5 kV	0 - 8 mA
CPx 15 805 12 5	12W	12 V	1.5 kV	0 - 8 mA
CPx 20 605 24 5	12W	24 V	2 kV	0 - 6 mA
CPx 20 605 12 5	12W	12 V	2 kV	0 - 6 mA
CPx 30 405 24 5	12W	24 V	3 kV	0 - 4 mA
CPx 30 405 12 5	12W	12 V	3 kV	0 - 4 mA
CPx 40 305 24 5	12W	24 V	4 kV	0 - 3 mA
CPx 40 305 12 5	12W	12 V	4 kV	0 - 3 mA
CPx 50 205 24 5	10W	24 V	5 kV	0 - 2 mA
CPx 50 205 12 5	10W	12 V	5 kV	0 - 2 mA
CPx 70 155 24 5	10.5W	24 V	7 kV	0 - 1.5 mA
CPx 70 155 12 5	10.5W	12 V	7 kV	0 - 1.5 mA
CPx 100 105 24 5	10W	24 V	10 kV	0 - 1 mA
CPx 150 604 24 5	9W	24 V	15 kV	0 - 0.6 mA
CPx 200 504 24 5	10W	24 V	20 kV	0 - 0.5 mA
CPx 300 304 24 5	9W	24 V	30 kV	0 - 0.3 mA

Replace x with N for negative output or P for positive output polarity



sales@etps.co.uk
0800 612 95 75

CPS

High Voltage Modules

Technical Data

Stability (ΔV_{IN}).....	$< 1 \times 10^{-4} \times V_{OMAX}$
Stability (ΔR_{LOAD}).....	$< 2 \times 10^{-4} \times V_{OMAX}$
Ripple & noise (typical).....	$< 2 \times 10^{-5} \times V_{OMAX}$
Ripple & noise (max).....	$< 5 \times 10^{-5} \times V_{OMAX}$
Temperature coefficient.....	$< 1 \times 10^{-4}/K$
Remote control.....	0 - 5V (0 - 10V option)
Protection.....	Overload and short circuit, INHIBIT signal, current and voltage limit
Case.....	Metal box or 3U cassette
Dimensions ($V_o \leq 7kV$).....	75 x 155 x 40mm (W x D x H)
Dimensions ($7kV < V_o \leq 20kV$).....	75 x 185 x 40mm (W x D x H)
Dimensions ($20kV < V_o$).....	95 x 185 x 40mm (W x D x H)
Dimensions ($V_o \leq 15kV$).....	3U x 8HP (40.64mm) cassette option
Dimensions ($15kV < V_o \leq 20kV$).....	3U x 16HP (81.3mm) cassette option
Supply voltage V_{IN}	$V_{IN} = 24VDC \pm 5\%$ or $V_{IN} = 11.5$ to $15.5VDC$
Output polarity.....	Factory fixed (x = p - Positive, x = n - Negative)
INHIBIT.....	TTL Low
Output Connection.....	600mm cable

Options Table

Code	Description
/P.....	Positive output polarity (Factory fixed)
/N.....	Negative output polarity (Factory fixed)
/AI-10.....	0 - 10 VDC Analogue interface for control and measurement (Only possible with 24V input)
/3U-SHV.....	Unit built as 3U x 8HP cassette with SHV connector for $\leq 6kV$
/3U-CPE.....	Unit built as a 3U x 8HP cassette with CPE connector for 7 to 15kV and a 3U x 16HP for 20kV
/ECH 124.....	Unit placed in 4 slot mainframe (see below for more information)
/ECH 128.....	Unit placed in 8 slot mainframe (see below for more information)
/ECH 12A.....	Unit placed in 10 slot mainframe (see below for more information)

19" Mainframes

Type	Slots	Power	Dimensions (H x W x D)
ECH 124	4 + 1	120W	½19" x 3U x 350mm
ECH 128	8 + 1	300W	19" x 3U x 350mm
ECH 12A	10 + 1	300W	19" x 3U x 350mm

