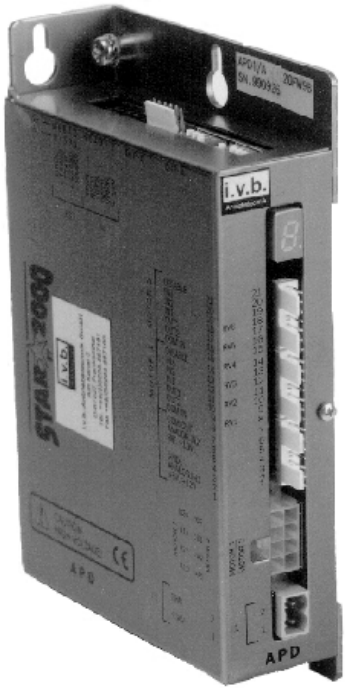
PRODUCT INFORMATION

ACP & D Limited

Star 2000 series
APD1



APD1 double axis chassis mounted 2-phase stepping motor driver from 0.2 Amp to 2.4 Amps

The market always demands more efficient step-motor-solutions which are optimally priced. In order to meet these demands we offer the **APD1** double axis stepping motor drive for 2-phase stepping motors from the Star2000 series.

Beside the usual step and direction inputs for control of the **APD1** drive it is also possible to control the drive via a RS 485 interface. By connecting a PC or a PLC to the **APD1** via the RS485 interface there is no requirement for a separate interface card to be used. All parameters and positional details regarding the indexing of the **APD1** are able to be adjusted online via the RS485 Interface.

The built in display gives all information about the actual status of the **APD1**.

By utilizing a high chopper frequency of 20KHz the **APD1** significantly reduces the resulting noise of the two attached stepping motors making it extremely quite when running whilst maintaining a smooth movement.

The **APD1** is able to utilize either an AC input power supply or a DC input power supply (see overleaf for details). It has extensive protection against over-temperature, over-voltage, under-voltage and short-circuits between outputs (phase to phase) and between outputs to ground are features provided by the **APD1** units.

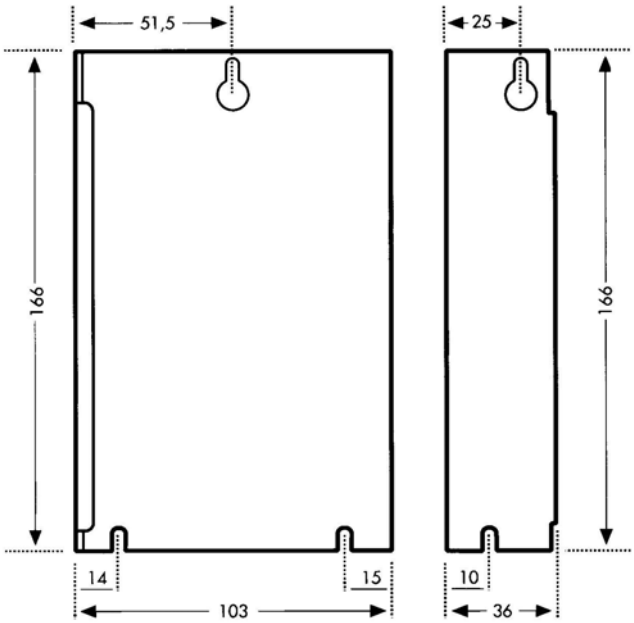
When combined with the stepping motor of the SB or MOT series the user will possess an extremely cost effective stepping motor system.

Also we can deliver the following associated accessories:
Stepping motors (type: SB; MOT; HN & HY); linear actuators; COBRA linear stepping motors; planetary gearboxes; display terminals; TP & NT-LC power supplies; heatsinks; and cables.

Technical characteristics

AC input Nominal supply voltage: (VAC) Maximum supply voltage: (VAC) Minimum supply voltage: (VAC) Motor voltage: (VDC)	 14-26 VAC 28 VAC 13 VAC 20-36 VDC *(in proportion to the input power supply value)*
DC input Nominal supply voltage: (VDC) Maximum supply voltage: (VDC) Minimum supply voltage: (VDC) Motor voltage: (VDC)	 20-36 VDC 39VDC 18VDC 20-36 VDC *(in proportion to the input power supply value)*
Current (minimum):	0.2 A
Current (maximum):	2.4 A *
Chopper frequency:	20 kHz
Output stage:	SGS L298 with temperature rise
Protection interfaces:	RS 485 half and full-duplex (for multi-axes operation)
Clock:	Maximum current 10mA with 24 VDC
	Minimum pulse width is 20µs
Direction of rotation:	Maximum current 10mA with 24 VDC
processor:	fast 16-Bit processor with 128 Kbytes Flash EPROM
Outputs:	PNP max. 10 mA
Step increment:	200 / 400 steps per revolution
enclosure:	IP 20
humidity:	10-90%, non-condensing
temp:	0-55°C
CE certification:	Available

Dimensions:



Special features:

*** <u>Maximum 1.5A at 25°C ambient</u>**

We recommend that a heat sink be used when operation beyond the above condition is required in order that the excess heat is able to be dissipated.

Heat sinks are available as an optional extra.

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