HIGH PERFORMANCE STEPPER DRIVES WITH AC POWER SUPPLY

STAC6 Series Starts at

- Current Output 0.5 to 6.0 A
- 90 to 135 Vac Input
- Configurator[™] Configuration Software
- Configurable Idle Current Reduction
- External Control Options
- Pulse and Direction
- Analogue Command Signal
- Host Command via RS232/485
- Fault Protection:
 - Over-Voltage, Under-Voltage
 - Over-Temp
 - External Output Shorts
 - Internal Amplifier Shorts
 - Motor Regeneration
- Multi-Axis System with SiNet[™] Hub
- Stand-Alone Programming on Si Model
- Microstepping Emulation: Up to 51,200 Steps/Revolution

Advanced Features

- Auto Setup Measures Motor Parametres and Configures Tuning Parameters
- Self-Test Detects Encoder and **Determines Resolution: Diagnoses Miswires and Open Phases**
- Torque Ripple Smoothing Assures Smoother Motion at Lower Speeds
- Comand Signal Smoothing Assures Smooth Acceleration/ **Deceleration Ramps**
- Anti-Resonance Eliminates Midrange Instability; Allows Stable Operation to 50 rps or Greater

Manufactured by Applied Motion Products for OMEGA

STAC6-Si, £665, shown smaller than actual size.

0

Status

PC/MMI

1 TUO

N

Encoder

3S-485/422

TUO

TAC6

G 🕀

RX+ RX-TX+ TX-GND

SPECIFICATIONS

A

POWER AMPLIFIER SECTION Amplifier Type: MOSFET, dual H-bridge, 4 quadrant Current Control: 4 state PWM at 20 KHz **Output Current:** STAC6: 0.5 to 6.0 A in 0.01 A increments STAC6-220: 0.5 to 3.2 A in 0.01 A increments DC Bus Voltage: Nominal 165 Vdc AC Input Voltage: STAC6: 94 to 135 Vac, 50/60 Hz STAC6-220: 94 to 265 Vac, 50/60 Hz Protection: Over/under-voltage. over-temp, external output shorts (phase-to-phase, phase-to-ground), internal amplifier shorts Idle Current Reduction: Reduction to any integral percent of full-current after delay (selectable in milliseconds) Motor Regeneration: Built-in regeneration circuit (25 W max)

CONTROLLER SECTION

Non-Volatile Storage: Configurations are stored in FLASH memory

653

STAC6-S, £535, shown smaller than actual size.

AC Power Supply

Status

PC/MMI

OUT 1

N

Encoder

2

3S-485/422

0UT 2

N

TAC6

G 🕀

1

RX+ RX-TX+ TX-GND

Step and Direction Inputs: Optically Isolated: 5 to 12V; minimum pulse width = 200 ms; maximum pulse frequency = 2 MHz

Speed Range: Depends upon selected resolution; amplifier is suitable for speeds up to 133 rps

Resolution: Software selectable from 200 to 51,200 steps/rev in increments of 1 step/rev

Encoder Option: Differential line receivers suitable for 200 KHz or greater Interface: RS232 and RS485 bus Ambient Temperature: 0 to 55°C Humidity: 90% non-condensing

INPUTS AND OUTPUTS

STAC6-S:

- 7 Digital Inputs: Two 5V, five 12 to 24V 3 Digital Outputs: 30V
- 2 Analogue Inputs: ±10V

STAC6-Si:

15 Digital Inputs: Two 5V, thirteen 12 to 24V 7 Digital Outputs: 30V

Drives and Motors

Configuration Software and

Programming

Cables

Included!



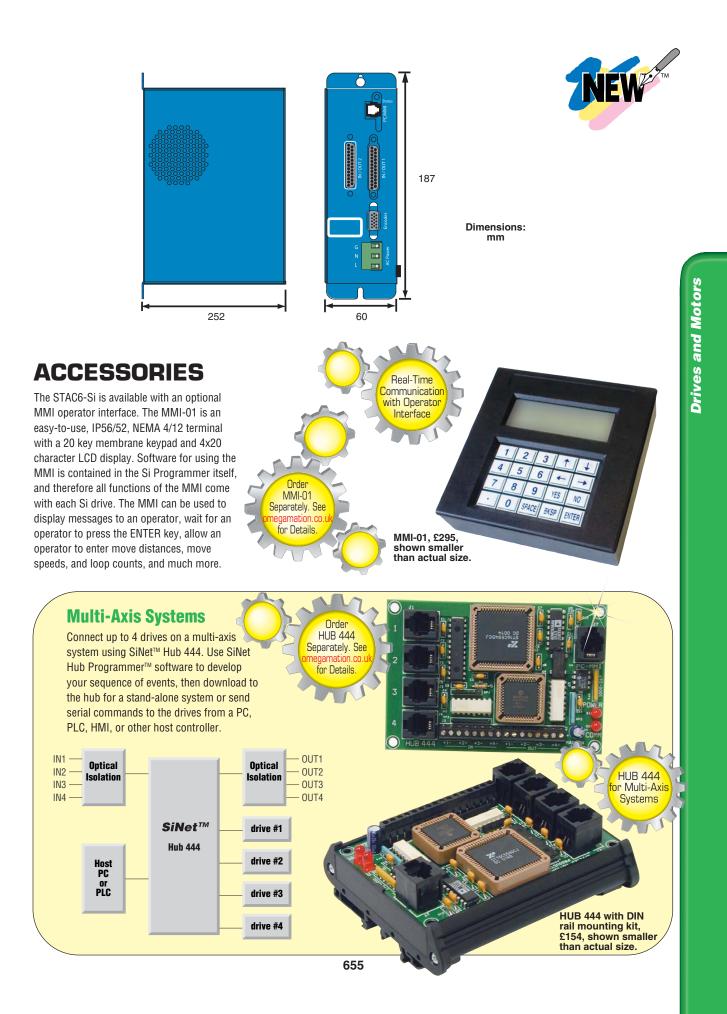
CONFIGURATOR™— CONFIGURATION SOFTWARE







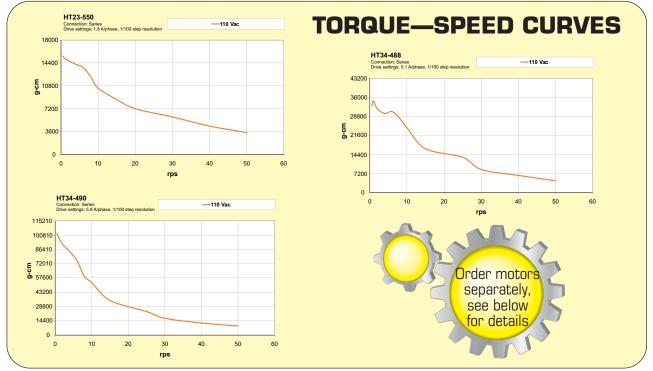
The CONFIGURATOR™ incorporates a new on-line help menu. All technical data, application information and advice on setting up the drive, now just a mouse click away.





OMBOB-1/OMBOB-2 Breakout Box for I/O Connector

- Break out DB-25 I/O Connector to Screw Terminals
- Includes 1 m Cable
- OMBOB-1: Compatible with all STAC6 Models
- OMBOB-2: Compatible with STAC6-Si



To Order (Specify Model Number)		MOST POPULAR MODEL HIGHLIGH			
MODEL NO.	PRICE	DESCRIPTION			
STAC6-S	£535	High performance stepper drive complete with AC power supply			
STAC6-Si	665	High performance stepper drive with AC power supply and Si Programmer™			
STAC6-220-S	600	High performance stepper drive with 220 Vac power supply			
STAC6-220-Si	735	High performance stepper drive with 220 Vac power supply and Si Programmer™			

* Software and download cable included.

Ordering Example: STAC6-S, high performance stepper drive with AC power supply, £725.

RECOMMENDED MOTORS

MODEL NO.	PRICE	HOLDING TORQUE g-cm	RATED VOLTAGE (V)	RATED CURRENT (A)	RESISTANCE OHMS	INDUCTANCE MH	ROTOR INERTIA g-cm ²
57 mm STEP MOTOR SPECIFICATIONS (RATINGS ARE WITH MOTOR CONNECTED IN PARALLEL)							
OMHT23-550	£133	18,362	3.2	2.83	1.13	3.8	480
120 mm STEP MOTOR SPECIFICATIONS (RATINGS ARE WITH MOTOR CONNECTED IN PARALLEL)							
OMHT34-488	149	46,806	1.6	8.6	0.4	1.3	1400
OMHT34-490	260	132,858	2.25	9.6	0.42	2.4	4000

Ordering Example: OMHT34-488, high torque step motor with 46,806 g-cm holding torque, £149. See pages 646 to 649 for additional stepper motor information.

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION		
OMBOB-1	£80	Breakout box for I/O connector #1		
OMBOB-2	80	Breakout box for I/O connector #2		
Ordering Example: OMBOR-1 breakout box for I/O connector #1 £80				

Ordering Example: OMBOB-1, breakout box for I/O connector #1, £80.

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Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters