



# TOWERPAK

## Cooling Tower Controller

- GP10 - Vector AC Drive
- Soft Switching 4th Generation IGBT's
- NEMA 3R Enclosure with Space Heater
- 3 Contactor Bypass
- Advanced Energy Savings
- Anti-Windmilling / Smart Speed Search
- Motor Auto Tuning for Optimum Performance

Dynamic, Static and On Line

### Cooling Tower Options

- Fluid Cooler Spray Pump Starter
- Damper Control
- Basin Heater Contactor
- Basin Temperature Controller
- De-Icing Control

### Enhanced LED / LCD keypad with memory

- VFD Diagnostic Display
- VFD Maintenance Display
- Copy / Paste / Compare Features

-10°C to +50°C (+14°F to +122°F) Ambient

### VFD Serial Communication Options:

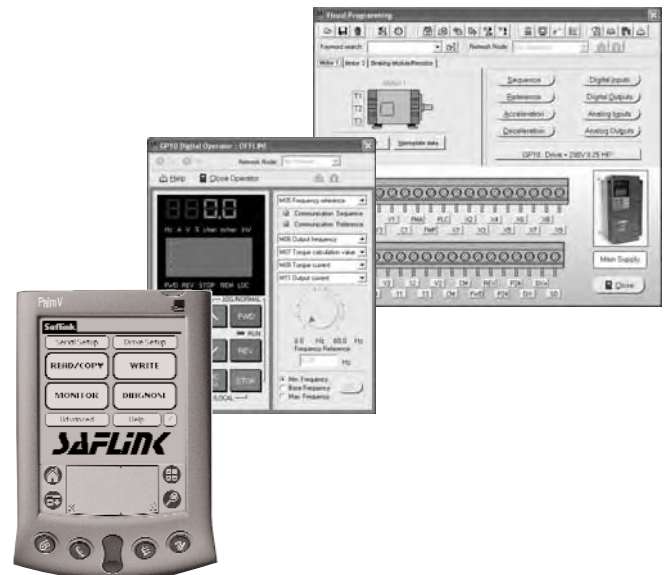
- Modbus (Standard)
- Johnson Metasys N2
- Siemens FLN
- LonWorks

Saflink for PC and PDA



*Saflink is an innovative tool designed for easy programming, troubleshooting and monitoring.*

*Please visit our Web site at [www.saftronics.com](http://www.saftronics.com) and try out a demo version.*





**24 / 7  
Emergency  
Support**

**Call**   
**800 533-0031**

To maintain maximum uptime and performance, Safronics offers the HVAC industry's only **24 hour / 7 day per week toll free emergency support**. The Safronics technical support team is available for trouble shooting assistance as well as weekend and holiday shipment of repair parts.

### OTHER SAFTRONICS HVAC PRODUCTS

S10	AC Drive
PC10	Mini Vector AC Drive
GP10	Vector AC Drive
FPC510M	PC10 Mini OptionPak
FPC510	GP10 OptionPak
FPC5010M	PC10 Mini Bypass Package
FPC5010	GP10 Bypass Package
SMART BYPASS	FPC5010S, TowerPak-S and HR1018S
TowerPak	Cooling Tower Controller
HR1018	18 Pulse Harmonic Reduction Technology

**Designed for outdoor mounting**, the Safronics **TowerPak** offers the latest in microprocessor and IGBT VFD technology in a packaged controller, designed to control a cooling tower. World class quality in design and manufacture, competitive pricing and uncompromising performance make the Safronics **TowerPak** the most versatile and reliable cooling tower control package available.

The base **TowerPak** includes Safronics' popular **GP10 VFD** in a three contactor bypass configuration. The standard enclosure is rated **NEMA 3R** for outdoor duty and includes thermostatically controlled space heaters and ventilation fans. The latest IGBT output section includes 4th generation - Soft Switching technology that reduces EMI/RFI emissions and provides a 50% reduction in dv/dt, allowing for longer motor leads and the elimination of costly output filters and reactors, as well as reliable operation in wet or humid ambient conditions. In addition, all Safronics drive products are rated for continuous duty at **50°C ambient** providing for year round operation in severe outdoor environments.

### TOWERPAK SPECIFICATIONS

Output Rating	3-phase, 208-230 Volts 56/60 Hz, 380-480 Volts 50/60 Hz
Voltage Fluctuation	+10 %, -15%
Control Method / Range	Sinusoidal PWM, Vector AC Control / 0 to 120 Hertz
Overload	110% for 1 minute, 300% instantaneous
Serial Communication	MODBUS RTU 485 as Standard, MetaSys N2, LonWorks, Siemens FLN
Ambient Temperature	-10°C to +50°C ( +14°F to +122°F)
Keypad Features	Backlit LCD / English Language, LED Monitor Display, Copy/Paste, I/O Monitor, Operation Monitor, Maintenance Display, Alarm Display with Memory
Carrier Frequency	0.75 to 15 kHz - 75 HP and less, 0.75 to 10 kHz - 100 HP and larger
Protective Functions	Motor O/L, Overcurrent, Overvoltage, Input Phase Loss, Overtemperature
Programmable I/O	(9) Digital Inputs, (3) Digital Outputs, Analog/Pulse Output
Enclosures	NEMA 3R Enclosure with Space Heater and Optional Sun Shield

### INTEGRATED CONTROL OPTIONS

Basin Heater Contactor	2.0 KW to 24 KW, 3-phase, 208-230 Volts 56/60 Hz, 380-480 Volts 50/60 Hz
Basin Temp. Controller	For integrated control of Basin Heater, Spray Pumps, Dampers and VFD
Spray Pump Starter	1.0 HP to 10 HP, 3-phase, 208-230 Volts, 56/60 Hz, 380-480 Volts 50/60 Hz
De-icing Control	VFD reversing for cooling tower de-icing
Damper Control	Integrated electronic damper control circuit
Sun Shield	Minimizes heating due to direct exposure to the sun. Includes stainless steel hardware.