



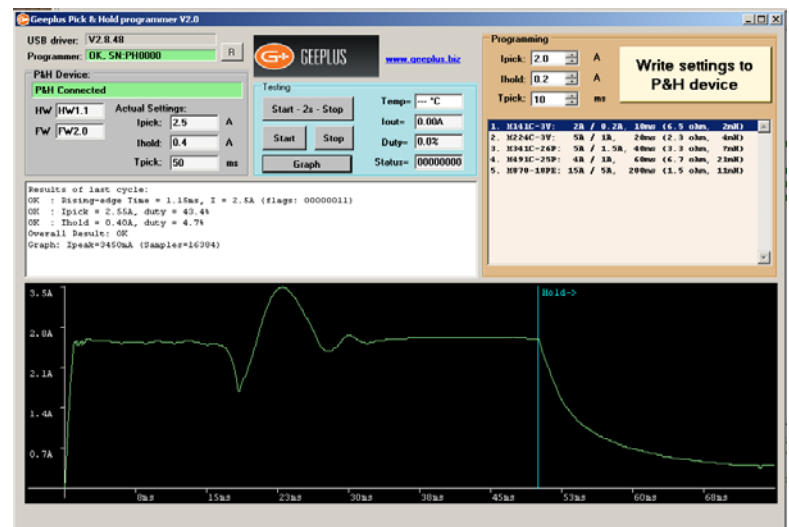
# PHu Analytic Pick & Hold Module

## DESCRIPTION

The PHu-ANA adds to the capabilities of the basic PHu module with a clear graphical display of the excitation current waveform. It helps the user to optimise excitation conditions for a solenoid device, to achieve required force and speed with minimum excitation power, and to see the response speed of the device. It fulfils the functions of PWM current regulator and oscilloscope, with ease of use and a simple USB connection to a PC.

Connected to a PC running the analytical version of programmer software, the PHu-ANA kit allows the user to define 'Pick Current', 'Pick Time', and 'Hold Current' parameters for excitation of the evaluated device.

While setting up parameters, the solenoid can be switched On or Off from the PC. The 'Start-2s-Stop' button energises the device for 2s only, this provides a degree of protection to small devices which can overheat rapidly if energised with excessive current.



The 'Graph' display shows the current vs time for an interval of 1.5x the chosen 'Pick' time. The graphical display allows the user to visualise the following parameters:

- Electrical rise time of the current
- The 'spike' represents impact at the end of stroke so allows stroke time to be monitored
- The reduction of current from 'Pick' to 'Hold' value can be monitored

The text data shows the achieved current values, and shows the duty cycle of the PWM current control in the Pick and Hold conditions. It provides some limited diagnosis of problems such as inadequate current capacity of the power supply.

When switched on for long periods, the screen also shows the duty cycle of PWM control, and the junction temperature of the power device in real time.

The PHu-ANA helps you to select an appropriately sized solenoid for your application, and to optimise the excitation current conditions to achieve required force or speed with minimum power consumption and heat dissipation.