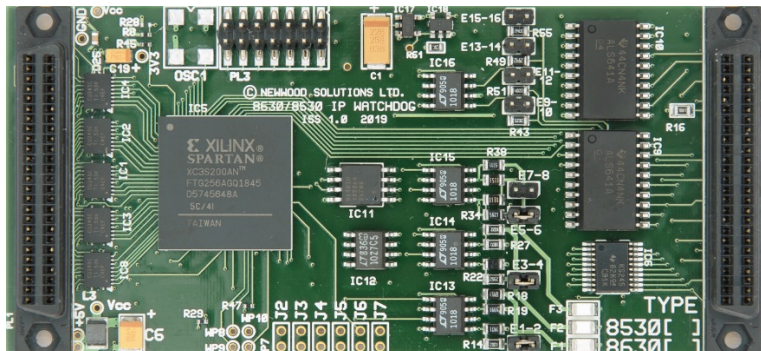


# WD8530 WD8630

# IP-WATCHDOG IndustryPack®



## Product Description

The Newwood Solutions IP-WD-8530/8630 is a single-width Industry Pack that provides a watchdog timer, power supply monitoring, temperature monitoring and general purpose TTL I/O with the following characteristics:

- Programmable Periodic or Watchdog Timer with interrupt and TTL outputs.
- Timer programmable from 1 millisecond to 65.536 seconds.
- Three external timer outputs:  
VMEbus SYSRESET\*  
Timer = zero  
Toggle on zero
- Four range: +24V, -24V, +48V or -48V auxiliary voltage monitor
- Three power supply monitors; +5V, +12V and -12V for internal or external supplies.
- Programmable Temperature Monitor/Thermostat.
- Open collector TTL outputs from Timer and Monitors with programmable polarity.
- Eight TTL compatible digital I/O lines
- Interrupts available from all I/O, Timer and Monitor Functions

## 8630 Added Functionality

The 8630 includes the power up system reset functionality of the Hytec VDS2081-R VME module. This function ensures that a crate reset is generated for a fixed duration (160ms +/-20%) whenever the crate is powered up. The unit archives this by generating a reset on the SYSRESET\* line of the P1 connector when the power is asserted.

The circuitry also ensures that intermittent power-down and power-up will generate reset for at least 80ms.

## Product Specifications

Size:	Single width Industry Pack 1.8ins x 3.9 ins
Digital I/O:	8 lines individually programmable as input or output. Outputs are open collector with 10k pull-up resistors, 48 mA sink capability. Input line interrupt polarities individually programmable.
Timer:	16-bit programmable timer. 1kHz input from IP Clock. Down counter, interrupt and TTL output when zero. On the fly counter re-load for extending time-out period. Watchdog and Periodic modes.
Watchdog Mode:	Time-out halts operation. VMEbus SYSRESET* on time-out. 1 millisecond to 65.536 seconds range.
Periodic mode:	Interrupts and TTL outputs at regular intervals. Toggle output for 50% duty cycle signals. Toggle output range 2 millisecond to 131.072 second cycles.
SYSRESET*:	VMEbus compliant SYSRESET* output. 48 mA sink, open collector driver, 256 millisecond duration. IP retains time-out indicator during SYSRESET* cycle.
Power ON SYSRESET* (8630 only) :	At crate power up the SYSRESET* is generated for 160ms +/-20% Intermittent power-down and power-up will generate reset for at least 80ms.
Monitors:	Three internal or external power supply voltage monitors. One external auxiliary monitor with four different taps. Temperature Monitor, -55 to +125 Celsius range. 0.5 deg C accuracy. All monitors generate interrupts and TTL outputs. 100 Hz low pass filter on Voltage Monitors.
Tolerance:	+5V, +12V and -12V volt monitors ANSI/IEEE STD 1014 1987 Rule 6.2.1 +48V, +24V -24V and -48V volt monitors: 10%.
Interrupts:	Single programmable interrupt vector. 8 digital I/O interrupt sources. One timer interrupt source. One temperature interrupt source. Four voltage monitor sources.
Operating temp:	0 to 45 deg C ambient
Current draw:	+5V highest current draw measured during test is 120mA. +5V average current draw is approx. 105mA +12V highest current draw measured during test is 15mA. -12V highest current draw measured during test is 5mA.