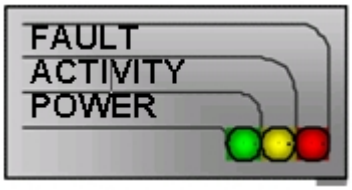
Activity and status LEDs

On the front plate of each module, three LEDS labelled Power, Activity and Fault, give information about the module status :



LED color	LED Purpose	Description
Green	Power	This LED indicates that the digital power supplies (5V or 3.3V) of the card are within the validity range. This LED is not software controlled.
Yellow	Activity	Driven by the FPGA, this LED indicates the model status : • LED off : model is not running • LED blinking once every about 2s : model is running Moreover, when the red fault LED is ON, the yellow Activity LED indicates error codes related to the FPGA of the module : • Steady ON : general error • 2 blinks : the application firmware is not programmed in the FPGA, the FPGA is loaded with its fallback SAFE program. Refer to the FPGA programming section for instructions on how to program the FPGA of the modules. • 3 blinks : the application firmware programmed in the FPGA does not correspond to the hardware, e.g. the FPGA is programmed for a Base Module but the card is a Switch Module. The module must be reprogrammed (refer to the FPGA programming section).
Red	Error	Driven by the FPGA, this LED indicates that a fault related to this module has been detected. In case an error is detected, the FPGA program attempts to protect the hardware, for example by disabling the faulty channels, and sets the fault LED to ON, informing the operator of this abnormal condition. In addition, the error condition is reported to the simulation model and displayed in the module's run-time panel. The fault conditions can come from hardware or software malfunction. Typical hardware faults are, but a not limited to : • Over tension, • Over current, • Over temperature. Typical software faults are, but are not limited to : • Invalid module configuration, either in the simulation model or the user interface, e.g. enabling several power rails for an output signal, • Incompatibility of the FPGA program and the module hardware Faults that can be transient, like over current, over voltage, etc., can be acknowledged from the module's run-time panel. Upon acknowledgment of the fault, the FPGA re-enables the hardware, and re-checks for the fault condition. If the fault condition is no longer detected, the red LED is cleared. If the fault condition is still present, the red LED is set to ON again. ⚠ The red LED of some modules (POM, PDL, SM) lights on during a few seconds when the system is powered up. This does not signal a fault of these modules.