

FireRaptor Quick-Start Guide – Single Panel / Single Module

⚠ DANGER



Arc Flash and Shock Hazard

De-energize or disconnect all sources of electrical power prior to installing and servicing equipment

PPE (Personal Protection Equipment) Required

Do not install nor service equipment without appropriate PPE

Refer to NFPA 70E and CSA Z462 for PPE requirements

HAZARDOUS VOLTAGE WILL CAUSE SEVERE INJURY OR DEATH

Please refer to IMO's installation guide for details on mounting and installation. Installation should be performed by a qualified electrical installer.

IMO Items needed

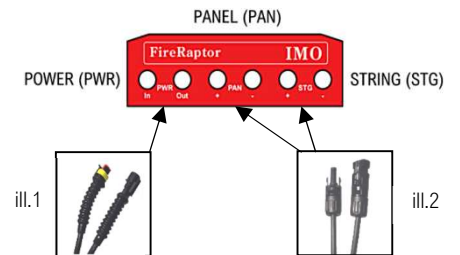
- Rapid shutdown switch (IMO Part number: FRS-ESWXXXX)
 - Control Power Cable (IMO Part number: FRS-SIGCAB1.8-F)
 - FireRaptor Rapid Shutdown module (IMO Part number: FRS-0XX)
- *X* – denotes options available for this – please refer to the sales brochure for further details.

Other product suggested and supplied by others:

- Wire / cable** – for AC or DC lines to the Rapid Shutdown switch, or from the Rapid Shutdown switch to the FireRaptors. Length and shielding will be application specific and should comply with local electrical standards.
- Junction Box or Weatherproof splice kit** – to connect DC wiring to the Control Power Cable (FRS-SIGCAB1.8-F)

Identify panel leads from the FireRaptor:

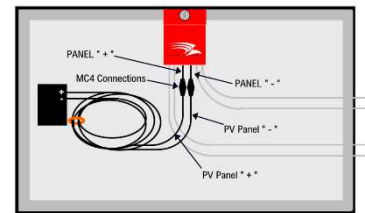
- “ Power “ Long Leads with weatherproof connectors (ill. 1)
- “ Panel “ (short leads) – Male and female MC4 – plugs into the leads of one solar panel. (ill. 2)
- “ String “ (long leads) – Male and female MC4 – Will serve as leads from panel into string.



Recommended Installation Order:

- Mount FireRaptor** to a single solar panel; either on the panel's extrusion frame or mounting hardware.
- Connect** the solar panel to the FireRaptor leads as follows:

- Solar Panel: Positive → FireRaptor PANEL “+”
- Solar Panel: Negative → FireRaptor PANEL “-”
- The STRING “+” and “-” from the FireRaptor serve as your solar panel source



Connecting FireRaptor Modules in Series

- FireRaptor STRING “+” → FireRaptor STRING “-” of adjacent module
- FireRaptor STRING “-” → FireRaptor STRING “+” of adjacent module
- FireRaptor POWER OUT → FireRaptor POWER IN of adjacent module

Junction or splice the DC source to the FRS-SIGCAB1.8-F signal cable and plug into the first FireRaptor – the junction or splice should be a meter from the first module in the array

