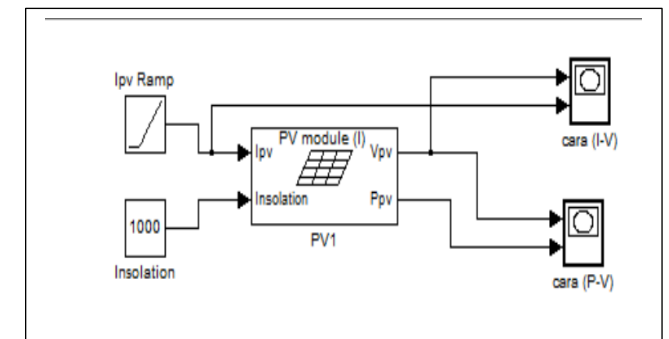
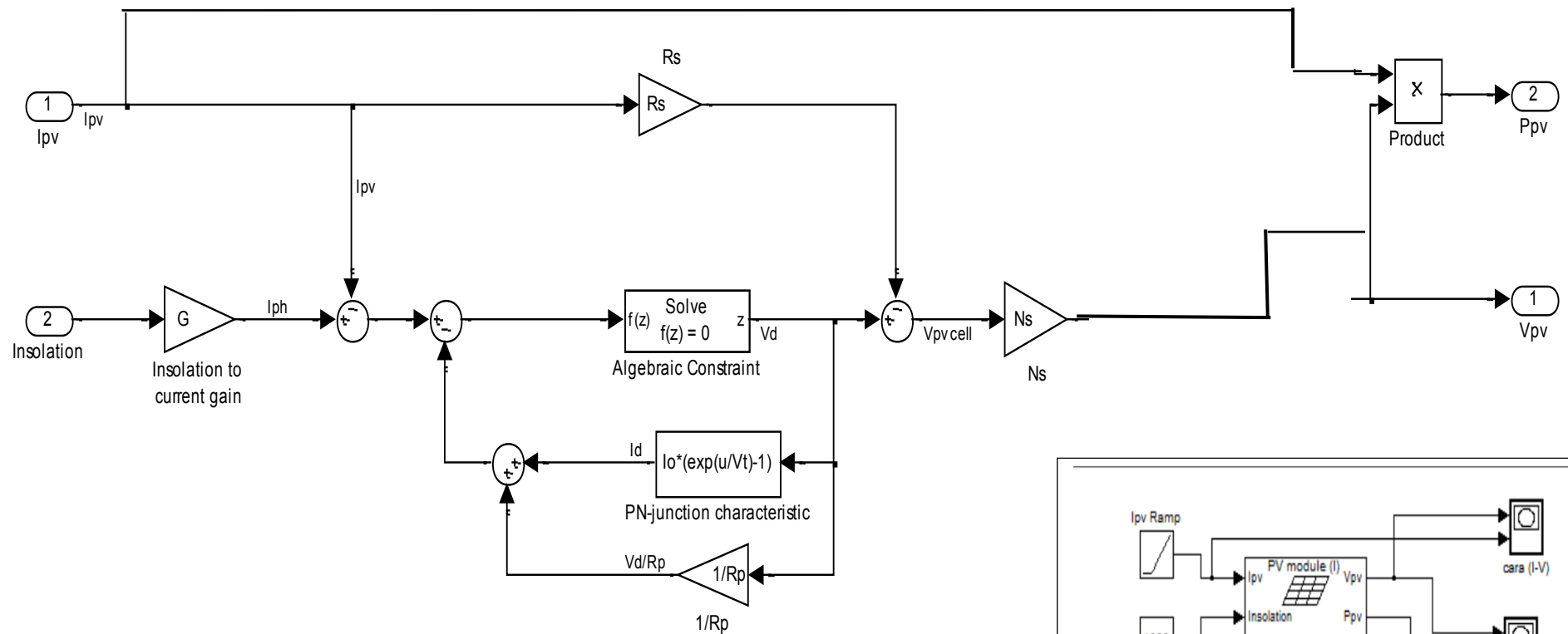


Simulation d'une Cellule solaire Photovoltaïque

Le module possède les caractéristiques suivantes à 1000 (w/m²) et 25°C.- Puissance crête : 38.4 w. - Courant de court-circuit : 2.41 A.
 - Tension à circuit-ouvert : 22.4 V. - Courant optimum : 2.2 A. - Tension optimale : 17.45 V.



Initialisation commands

```

Ns = round(Voc/0.61);
Vt = 26e-3;
G = Isc/1000;
Vmpc = Vr/Ns;
Voce = Voc/Ns;
Rmpp = Vmpc/Ir;

Rp = 100*Voce/Isc;
Vdm = Voce;
for i=1:10
    Idm = Isc - Ir - Vdm/Rp;
    Io = (Isc-Voce/Rp) / (exp(Voce/Vt) -1);
    Vdm = Vt*log(Idm/Io+1);
    Rs = (Vdm-Vmpc)/Ir;
    Rd = (Rmpp - Rs)*Rp/(Rp-Rmpp+Rs);
    Idm = Vt/Rd;
    Rp = Vdm/(Isc-Ir-Idm);
end

```

