

[Help](#)

```
#include "
href../../mod/cir1d/cir1d_stdi/cir1d_stdi_h_src.pdfstdi.h"
static NumFunc_1 put =
{
    Put,
    {"Strike", PDOUBLE, {100}, FORBID, UNSETABLE}, {" ", PREMIA_NULLTYPE, {0}, FO
    CHK_call
};

static TYPEOPT Caplet =
{
    {"Payoff", NUMFUNC_1, {0}, FORBID, SETABLE}, /* PayOff; */
    {"Euro", BOOL, {EURO}, FORBID, SETABLE}, /* EuOrAm */
    {"Option Maturity", DATE, {0}, FORBID, SETABLE}, /* OMaturity;*/
    {"Contract Maturity", DATE, {0}, ALLOW, SETABLE}, /* BMaturity;*/
    {"Nominal Value", PDOUBLE, {0}, ALLOW, SETABLE}, /* Nominal;*/
    {"Caplet Rate", PDOUBLE, {0}, ALLOW, SETABLE}, /* FixedRate;*/
    {"Reset Period", PDOUBLE, {0}, ALLOW, SETABLE}, /* ResetPeriod;*/
    {"First Reset Date", DATE, {0}, ALLOW, SETABLE}, /* FirstResetDate;*/
    {"Nb of Reset", PINT, {0}, FORBID, SETABLE}, /* NbResetDate;*/
};

static int OPT(Init)(Option *opt, Model *mod)
{
    TYPEOPT *pt = (TYPEOPT *) (opt->TypeOpt);

    if (opt->init == 0)
    {
        opt->init = 1;
        opt->nvar = 9;
        opt->nvar_setable = 9;

        pt->PayOff.Val.V_NUMFUNC_1 = &put;

        (pt->EuOrAm).Val.V_BOOL = AMER;
        (pt->OMaturity).Val.V_DATE = 2.0;
        (pt->BMaturity).Val.V_DATE = 3.0;
        (pt->Nominal).Val.V_PDOUBLE = 1.0;
        (pt->FixedRate).Val.V_PDOUBLE = 0.05;
    }
}
```

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(pt->ResetPeriod).Val.V_PDOUBLE = 0.5;
(pt->FirstResetDate).Val.V_DATE = 0.5;
(pt->NbResetDate).Val.V_PINT = 10;
(pt->PayOff.Val.V_NUMFUNC_1)->Par[0].Val.V_PDOUBLE = 0.22313;

/* the following variables are set interactively or not */

pt->PayOff.Vsetable = UNSETABLE;
pt->EuOrAm.Vsetable = UNSETABLE;
pt->OMaturity.Vsetable = UNSETABLE;
pt->BMaturity.Vsetable = SETABLE;
pt->Nominal.Vsetable = UNSETABLE;
pt->FixedRate.Vsetable = SETABLE;
pt->ResetPeriod.Vsetable = SETABLE;
pt->FirstResetDate.Vsetable = UNSETABLE;
pt->NbResetDate.Vsetable = UNSETABLE;

}

return OK;
}

MAKEOPT(Caplet);

```