

# Pds bldData

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## Beamline Data

### Class BldDataFEEGasDetEnergy

Four energy measurements from Front End Enclosure Gas Detector.

PV names: GDET:FEE1:11:ENRC, GDET:FEE1:12:ENRC, GDET:FEE1:21:ENRC, GDET:FEE1:22:ENRC

Public Attributes:

```
double f_11_ENRC; /* in mJ */
double f_12_ENRC; /* in mJ */
double f_21_ENRC; /* in mJ */
double f_22_ENRC; /* in mJ */
```

Public Member Functions:

```
int print() const;
```

Prints current value of all four energy process variables. Returns 0 when successful.

### Class BldDataEBeamV0

Public Attributes:

```
uint32_t uDamageMask;
double fEbeamCharge; /* in nC */
double fEbeamL3Energy; /* in MeV */
double fEbeamLTUPosX; /* in mm */
double fEbeamLTUPosY; /* in mm */
double fEbeamLTUAngX; /* in mrad */
double fEbeamLTUAngY; /* in mrad */
```

Public Member Functions:

```
int print() const;
```

Prints current value of all EBeam process variables. Returns 0 when successful.

### Class BldDataEBeam

Public Attributes:

```
uint32_t uDamageMask;
double fEbeamCharge; /* in nC */
double fEbeamL3Energy; /* in MeV */
double fEbeamLTUPosX; /* in mm */
double fEbeamLTUPosY; /* in mm */
double fEbeamLTUAngX; /* in mrad */
double fEbeamLTUAngY; /* in mrad */
double fEbeamPkCurrBC2; /* in Amps */
```

Public Member Functions:

```
int print() const;
```

Prints current value of all EBeam process variables. Returns 0 when successful.

## Class BldDataPhaseCavity

```
// PV names: UND:R02:IOC:16:BAT:FitTime1, UND:R02:IOC:16:BAT:FitTime2,
// UND:R02:IOC:16:BAT:Charge1, UND:R02:IOC:16:BAT:Charge2
```

Public Attributes:

```
double fFitTime1; /* in pico-seconds */
double fFitTime2; /* in pico-seconds */
double fCharge1; /* in pico-coulombs */
double fCharge2; /* in pico-coulombs */
```

Public Member Functions:

```
int print() const;
```

Prints current value of all four PhaseCavity process variables. Returns 0 when successful.