

Reading & Writing instruNet Channels

Application Note #33, 8/13/2002

The subroutines `GetChannelValue_iNet()` and `SetChannelValue_iNet()` are used to read and write instruNet channels with one scalar value. They typically require 50 to 300us to execute. They contain 4 arguments that specify an instruNet channel address, and then a value that is read or written, in engineering units. For example, if channel {1,1,1,1} is connected to a thermocouple at 30C, then:

```
x = GetChannelValue_iNet(1,1,1,1,&errorCode)
```

will fill variable x with 30. These routines are exposed through the `iNet32.DLL` and through the `INET_INT.C` interface file; and are documented in file `INET_INT.C`. An example use of these functions in C is shown in file `INET_EX3.C`. Prototypes for these two functions can be found in `INET_MCS.H`.

The subroutines `GetFieldValue_iNet()` and `SetFieldValue_iNet()` are similar, and are used to read and write fields within each channel (e.g. sensor type, filter settings, etc). For example, the following C code would set the sensor type on channel {1,1,1,1} to "current".

```
err = SetFieldValue_iNet(1,1,1,1,sgt_VinHardware,  
                        fldNum_Vin_sensorType, ion_SensorType_Current);
```

The constants that address the various fields can be found in file `INET_INT.H`.