
TCPDAQ data structure

TCPDAQ Data Structure

```
typedef struct _AlarmInfo //Alarm Event data structure
{
    u_char    szIP[4];           //The IP address which cause the alarm change
    u_short   szDateTime[6];    //E.x 2001/09/23 10:12:34:567 (Year/Month/Day Hour:Minute:Second:mSecond)
    u_short   byChannel;        //The Channel of which cause the alarm change
    u_short   byAlarmType;      //0x00:AIO Low Alarm
                                //0x01:AIO High Alarm
                                //0x20:DIO Alarm
                                //0xF0:Connection Alarm
    u_short   byAlarmStatus;    //0:Alarm ON to OFF, 1:Alarm OFF to ON
    u_short   wValue;           //Alarm value.For DIO, this value could be "0" or "1" means that "ON" or "OFF"
                                //          For high or low alarm, this is the AIO value.
                                //          For connection lost, this value is '0'.
} _AlarmInfo;
```

```
typedef struct _StreamData //Stream Event data structure
{
    u_char    szIP[4];           //The IP address which send the stream datae
    u_short   szDateTime[6];    //E.x [2001]/[09]/[23] [10]:[12]:[34] (Year/Month/Day Hour:Minute:Second)
    u_short   DIN;              //Digital input data (DI#0~DI#15)
    u_short   DOUT;             //Digital output data (DO#0~DO#15)
    u_short   wData[32];        //Digital input Counter (Each channel occupies 4 Byte)
} _StreamData;
```

```
typedef struct ModuleInfo // Used For Scan_Online_Modules(..)
{
    u_char    szIP[4];           //IP address
    u_char    szGate[4];        //Gateway
    u_char    szMask[4];        //Submask
    u_char    szDHCP;           //DHCP status 01=enable, 00=disable
    u_char    szID;             //Module ID number
    u_char    szMacAddr[6];     //MAC address of module
    u_short   szModuleNo;       //Module name
    u_char    szBuffer[12];     //Buffer reserved for TCPDAQ.DLL
} ModuleInfo;
```

```
typedef struct ModuleData //Used for function TCP_ReadAllDataFromModule (..)
{
    u_char    Din[16];          //Digital input data (DI#0~DI#15),available for EDAM9050/51/52
    u_char    Dout[16];         //Digital output data (DO#0~DO#15),available for EDAM9050/51/52/17/19
    u_char    DiLatch[16];      //Digital input latch status (DI#0~DI#15),available for EDAM9050/51/52
    long      DiCounter[16];     //Digital input counter value (DI#0~DI#15),available for EDAM9050/51/52
    double    AiNormalValue[16]; //Analog Input value(AI#0~AI#15),available for EDAM9015/17/19
    double    AiMaxValue[16];   //Analog maximum value(AI#0~AI#15),available for EDAM9015/17/19
    double    AiMinValue[16];   //Analog minimum value(AI#0~AI#15),available for EDAM9015/17/19
    u_char    AiHighAlarm[16];  //Analog high alarm status(AI#0~AI#15),available for EDAM9015/17/19
    u_char    AiLowAlarm[16];   //Analog low alarm status(AI#0~AI#15),available for EDAM9015/17/19
    u_char    AiChannelType[16]; //Analog channel Type, available for EDAM9015/17/19
    u_char    AiBurnOut[16];    //Analog channel burn out status,available for EDAM9019/15 only
    double    CJCTemperature ;  //Cold junction temperature,available for EDAM9019 only
} ModuleData;
```
