

### **4.3 Commands:**

#### **Power**

##### **SET\_POWER\_ON**

This command is used to switch the power supply on.

reply **POWER\_IS\_ON**

##### **SET\_POWEROFF**

This command is used to switch the power supply off.

reply **POWER\_IS\_OFF**

#### **Current**

##### **SAxxxxxxxx**

This command is used to set current in micro amperes in bipolar mode.

SA: Set Ampere s: + or – for polarity xxxxxxxx: current in micro Amperes.

reply **+xxxxxxxxµA**

##### **SETREGUL\_AMP**

This command starts the regulation of current.

reply **CURRENT\_REGU**

##### **READ\_CURRENT**

This commands reads the real time current (as displayed on the unit) in micro amperes.

s: + or – for polarity xxxxxxxx: current in micro Amperes.

reply **CsxxxxxxxxµA**

##### **READ\_CURRSET**

This command reads the last current setting given in micro amperes.

s: + or – for polarity xxxxxxxx: current in micro Amperes

reply **sxxxxxxxxµA**

##### **READ\_C\_LIMIT**

This command reads the Current Limit in Amperes.

reply **CL=xxx.xxxxA**

##### **SET\_STAND\_BY**

This command stops the regulation or pause the regulation.

reply **REGUL\_PAUSED**

##### **SCL=xxxxxxxx**

This command is used to set the Current limit in amperes.

reply **Climit=xx.xxx**

#### **Field**

##### **SGxxxxxxxx**

This command is used to set field in milliGauss in bipolar mode.

SG: Set Gauss s: + or – for polarity xxxxxxxx: for milliGauss

reply **FsxxxxxxxxmG**

##### **READMAGFIELD**

This command reads the magnetic field (as displayed on the unit) in milliGauss.

s: + or – for polarity xxxxxxxx: for milliGauss

reply **FsxxxxxxxxmG**

##### **SETREGUL\_FLD**

This command starts the regulation of field.

reply **FIELD\_\_REGUL**

##### **READ\_VOLTAGE**

This command reads the voltage in volts (as displayed on the unit).

reply **VOLT+xx.xxxV**

##### **READ\_FLD\_SET**

This command reads the last field setting given in milliGauss.

s: + or – for polarity xxxxxxxx: for milliGauss

reply **FsxxxxxxxxmG**

##### **SET\_STAND\_BY**

This command stops the regulation or pause the regulation.

reply **REGUL\_PAUSED**

#### **Remote**

##### **START\_REMOTE**

This command is used to switch to remote mode.

reply **REMOTE\_IS\_ON**

##### **STOP\_\_REMOTE**

This command is used to switch to normal mode.

reply **REMOTE\_IS\_OF**

### Edge mode

**EDGE\_MODE\_ON**reply **STARTED\_EDGE**

This command is used to set the field reading in edge mode.

**EDGE\_MODE\_OF**reply **STARTED\_EDGE**

This command is used to set the field reading in normal mode.

**NOTE:** The edge mode configuration can only be done in local.

### RAMPE

**SULpxxxxxxx**reply **ULIMIT=X.XXT**

This command is used to set upper ramp limit.

SUL: string P: + or - for polarity xxxxxxxx: field in Gauss

If limit greater than the limit of supply:

reply **U\_LIMIT!<=1T****SLLpxxxxxxx**reply **ULIMIT=X.XXT**

This command is used to set lower ramp limit.

SLL: string P: + or - for polarity xxxxxxxx: field in Gauss

If limit greater than the limit of supply:

reply **U\_LIMIT!<=1T****SFS=xxxxxxx**reply **F\_STEP=X.XXT**

This command is used to set the step size of field during the ramp.

Xxxxxxxx: field in Gauss

If the command exceeds the limit

reply **F\_STEP!<=01T****SWT=xxxxxxx**reply **t\_WAIT=xxxxS**

This command is used to set the amount of time to wait between steps after reaching stability.

xxxxx: time in Seconds

If the command exceeds the limit

reply **!tWAIT>1000s****START\_RAMP\_F**reply **RAMP\_STARTED**

This command is used to start the ramp with steps of field defined by the user.

**STOP\_\_RAMP\_F**reply **RAMP\_STOPPED**

This command will stop the ramp started by the above command.

### Ethernet

**READ\_IPADRES**reply: **xxx.xxx.xxx.xxx**

This command is used to read the present **IP** address saved in the device.

**READ\_NMADRES**reply: **xxx.xxx.xxx.xxx**

This command is used to read the present **net mask** address saved in the device.

**READ\_GWADRES**reply: **xxx.xxx.xxx.xxx**

This command is used to read the present **gateway** address saved in the device.

**READ\_DNADRES**reply: **xxx.xxx.xxx.xxx**

This command is used to read the present **domain name server** saved in the device.

**READ\_PORTADR**reply: **PORTxxxxxxx**

This command is to read the present **port address** of the device.

## Status

### READ\_STATUS1

reply **xxxxxxxxxxxx**

**xxxxxxxxxxxx** - where the bits corresponds to :

STATUS		
ILOCK1	1 = Normal, Close	0 = Fault, Open
ILOCK2	1 = Normal, Close	0 = Fault, Open
ILOCK3	1 = Normal, Close	0 = Fault, Open
Security	1 = Normal, Close	0 = Fault, Open
Remote	1 = External supply Command	0 = MPU Command, local or distance
Gaussampere	1 = Current regul mode	0 = Field regul mode
Regulation	1 = In Regulation	0 = Stand by, Regulation off
Power	1 = Output Power is On	0 = Power is Off
Edge Mode	1 = Edge Mode is On	0 = Edge Mode is Off
Maintenance	1 = Maintenance is On	0 = Maintenance is Off
Heater	1 = Heater On	0 = Heater Off
RAZ	1 = RAZ status On	0 = RAZ Off

## RS232 Commande for TCP/IP Config

**The following can be command only through RS232 connection.**

Each address is sent in 2 parts. The two must be sent for the address to complete and then it will be updated. If IP2 is sent first, the reply will be **ip2=xxx.xxx**, else if the IP1 is sent first and then the IP2, the reply will be **"ip=xxx.xxx.xxx.xxx"**, which means the address is completely received and is updated.

If there is an error in the command, the device returns **"WRONG ADDRES"**.

**IP1= XXX.XXX**

reply: **ip1=xxx.xxx**

**IP2= XXX.XXX**

reply: **ip2=xxx.xxx or**

**Reply: ip=xxx.xxx.xxx.xxx**

This command is used to change the **IP** address of the power supply

**NM1= XXX.XXX**

reply: **nm1=xxx.xxx**

**NM1= XXX.XXX**

reply: **nm2=xxx.xxx or**

**Reply: netmask=xxx.xxx.xxx.xxx**

This command is used to change the **net mask** of the unit

**GW1= XXX.XXX**

reply: **gw1=xxx.xxx**

**GW1= XXX.XXX**

reply: **gw2=xxx.xxx or**

**Reply: gateway=xxx.xxx.xxx.xxx**

This command is used to change the **gateway** of the unit

**DN1= XXX.XXX**

reply: **dn1=xxx.xxx**

**DN1= XXX.XXX**

reply: **dn2=xxx.xxx or**

**Reply: nameserver=xxx.xxx.xxx.xxx**

This command is used to change the **domain name server** of the unit

**PORT0000XXXX**

reply: **PORT0000xxxx**

This command is used to change the port address used for communication.