Command   AGEN

PURPOSE   Create SATAN analyzers

PARAMETERS

ANLID   Analyzer name; must begin with a letter.
/DIMENSION(n)   Number of dimensions (1 or 2).
/LIMITS(l)   List of channel number limits for each dimension (2 or 4 values).
/BINS(b)   Bin size(s) (number of channels per spectrum element) for each
                    dimension (1 or 2 values). Any (also non-integer) value is supported.
/TYPE(t)   Analyzer type, indicates the type of data to be stored.

t	data type	max. counts
FIXED	BIN FIXED(15) (4 bytes)	32767
FLOAT	DEC FLOAT(6) (4 bytes)	3.4E38

                    If omitted, FLOAT analyzer type is assumed.
/MODE(m)   Analyzer mode, indicates the nature of the measured quantity (x value).

m	nature of quantity	representation	(GRAF notation)
ANALOG	continuous values	histogram	(HT0)
DIGITAL	discrete values	data points	(LT1)

                    If omitted, ANALOG analyzer mode is assumed.
/COND(c)   Number of conditions.
/TITLE(t)   Title of analyzer; if omitted, the title is equal to its name.
/COMMENT(c)   Specifies the comment of the analyzer.
/CXAXIS(c)   Caption of the x axis; default value is "Channel".
/CYAXIS(c)   Caption of the y axis; default value for 1-dim. analyzers is "Counts".
/LINESYMBOL(c)   Graphical presentation of the data (line and symbols) in GRAF format.
/FCAL(f)   Calibration factor(s) for the x axis and (eventually for a 2-dim.
                    analyzer) for the y axis. Channels are multiplied by this factor.
/LIKE(anl)   The attributes above are copied from another analyzer specified by
                    analyzer identifier "anl".

REMARKS   Missing analyzer attributes are prompted. If the keyword "/LIKE" is
                    used, other specifications are ignored. Analyzer numbers are assigned
                    in sequence of creation.
                    Arrays of analyzers are supported up to 5 dimensions.

EXAMPLE   AGEN MASS / LIMITS(0,300) BIN(1) CXAX({Mass number})
                    The analyzer MASS is created reaching from channel 0 to channel 300.
                    The caption of the x axis is "Mass number".

TUTORIAL   (The tutorial gives the opportunity to test the function of the command
                    by entering the sequence of bold-listed commands into SATAN.)

Enter command:
agen Test / dim(1) limits(0,1000) bins(1)
Enter command:
aatt test
Analyzer id   nmbr   type   dim.   limits   binsz.
TEST   2   FLOAT   1   0   1000   1
Analog (continuous) spectrum
Linesymbol: HT0
CALIBRATION FACTOR: 1
TITLE: TEST
COMMENT:
X: Channel   Y: Counts
Number of conditions: 1