

GT-321 RS232 Communication Protocol

The GT-321 is configured for 9600 baud, 8 data bits, no parity and one stop bit.

Commands (ASCII characters):

0	Start Counting
1	Change Size Range
D0<Enter>	Disable Automatic Records
D1<Enter>	Enable Automatic Records
L	Send Last Record
8	Display Handheld Utility Commands
?	Display commands

Start Counting

Start a one minute count cycle. This instrument is intended for intermittent handheld operation. For continuous operation, delay a minimum of 20 minutes between samples; otherwise, the operating current will exceed the charging current and the battery will slowly discharge.

Change Size Range

The GT-321 displays five different size ranges. The Change Size Range command is used to select the next size range. This command is equivalent to pressing the Select Key. (Note 1)

Disable Automatic Records

Do not output a record after each count cycle.

Enable Automatic Records

Output a record after each count cycle.

Send last record

Output the data from the last count cycle.

Display Commands

Output the help menu.

Example Record (CSV – Comma Separated Variable):

SIZE1,COUNT1,SIZE2,COUNT2<LF>

SIZE1	=	Channel one size - fixed size (Note 2)
COUNT1	=	Channel one count
SIZE2	=	Channel two size - selectable size (Note 3)
COUNT2	=	Channel two count
<LF>	=	Line feed

Notes:

1. The GT-321 will display one size range. The unit actually has two count channels. Channel one is fixed at the smallest size. Channel two is selectable (Note 3).
2. Channel one size (SIZE1) is fixed at the smallest size – normally 0.3 microns.
3. Channel two size (SIZE2) is selectable using the Select Key or the Change Size Command. The standard sizes are 0.5, 1.0, 2.0 and 5.0 microns. SIZE2 will default to 0.5u (smallest channel two size) when the channel one size (0.3u) is displayed.