RMS INSTRUMENTS
Data Recording Systems

RELEASE NOTES

GP300 GRAPHIC PRINTER / CHART RECORDER

Firmware Releases RMS1780-01-C, 02-C

These release notes contain important information about the new firmware and how it will affect the performance of instruments in which it is installed. The notes include information about enhancements, adaptive changes, and corrections to known problems. Please read this documentation carefully.

NOTE:

RMS1780-01-C and RMS1780-02-C are parallel firmware revisions. They are functionally identical, with the exceptions noted below:

RMS1780-01-C	RMS1780-02-C
• Requires RMS3758 Digital I/O Interface • Supports rates up to 115.2 kbps on serial ports	• Requires RMS3758-1 Digital I/O Interface • Supports rates up to 230.4 kbps on serial ports
Checksum: ***** 0529 7324 *****	Checksum: ***** 0529 7468 *****

1. The firmware now supports various *safety relaxation levels* (SRLs). Relaxing certain safety features and checks simplifies operation at high print rates. The SRL can only be changed via the remote control port, using the appropriate command of the binary protocol.

   • Disable checking *speed* X *power*. This prevents errors 1-24 and 1-25, and avoids "gaps" in the background grid when changing chart speed while the chart is running.

   • Do not ramp-up to new target speed. This applies whether increasing speed by > 5 mm/sec, or switching the chart on with a target speed > 100 mm/sec.

2. A new command in the binary command set, PDRN ($1F_{hex}$), allows printing/advancing for multiple lines. The command is analogous to, but more efficient than, sending multiple PDR ($1A_{hex}$) commands.

3. The code handling data reception via the (serial) remote control port has been made more efficient. This reduces the chances of overflowing of the receive FIFO, when operating at high print rates with heavy task loads.

4. A *simplified annotation* mode is now supported. When this mode is enabled, mnemonics embedded within annotation messages or trace identification labels, are NOT interpreted. The mnemonics (and enclosing quotes) are printed *verbatim*.

   The simplified annotation mode significantly reduces the computational load. It can only be enabled or disabled via the remote control port, using the appropriate command of the binary protocol.

5. A new command, CTH ($0E_{hex}$), can be used to force a number of subsequent sample points to be plotted just as 'dots', rather than 'lines'. Thus, by ignoring previous trace history, one can for example prevent the drawing of lines from "old" to "new" sample points when a new recording starts.