

<b>CPC LEAK DETECTOR INTERFACE FIRMWARE VARIATIONS</b>		<b>RL220</b>
<b>VERSION</b>	<b>DESCRIPTION</b>	<b>DATE</b>
v0.00.0	Original issue.	Feb 2012
v0.00.1	Warm up text error corrected. Global fault indicator added.	Apr 2012
v0.00.2	Modbus link changed to 2 stop bits.	June 2013
v0.00.3	Global fault data facility added. Modbus port speed programmable. Zone equipment fault added. Standardized Modbus code used.	Jan 2014
v0.00.4	Global equipment fault status operation changed. CPC leak level thresholds added for display & communications purposes. Display backlight control added. Graphical display bit data added. Zone number broadcast added. Start address for PROM check sum redefined. End of address for PROM checksum corrected. Phoenix emulation added.	Jan 2015
v0.00.5	Signed binary word data type with application subroutine call added. Latest polling time uses this new data type. Phoenix memory initialisation code corrected. Special cases added for initial power up (1 <sup>st</sup> minute) in both Phoenix and non Phoenix modes. Call to write to NVRAM added on default write of unit nos and factory settings. Unsafe data timer initial value extended to 120 sec. Phoenix build no added on item 929. Start of time moved to Jan 1 <sup>st</sup> 2012.	July 2015
v0.00.6	Phoenix enhanced to Phoenix 3 to use comms devices more efficiently. Modbus reply error handling corrected to ensure retries on error replies. Phoenix CPU operating conditions added.	July 2016
v0.00.7	Converted for 31 channels. 38.4kb communications allowed on CPC data link. Value data suppressed on inoperable channels. Modbus comms adjustable time delays added. Interface band rate setting moved from item 909 to item 39.	July 2016
v0.00.8	Fault due to recoding of mode data introduced in v0.00.6 corrected. Modbus communications suspended while parameter data is unsafe. Minor refactoring of initialization code to ensure minimum of 1 channel operation. Minor refactoring of alarm bit setting code. Log data for channels 17-31 corrected error.	Oct 2016
v0.00.9	Channel 17 mode error corrected.	Nov 2016
v0.01.0	Phoenix 4 operation. Base 32 encoding enabled.	Aug 2017
v0.01.1	Modbus inter-character timing for Phoenix 4 operation made adjustable on item 36.	Nov 2017
v0.01.2	Modbus received message length used in protocol handler code. Phoenix 4 only message handling code on Phoenix implemented units. Global fault handling error corrected	Mar 2018
v0.01.3	Modbus received message length checked against maximum and minimum values for validity.	Mar 2018