



Tcp/ip Version 03.00 Update

April 6, 2006 Application Note 022 Page 1

TCP/IP Version 3.0 Update Features:

Keep Alives

Version 3.0 implements the tcp/ip keep-alive feature. Keep-Alive causes the reader to constantly check any open tcp connections to make sure they are still active and available. The keep-alive feature checks these connections after 1 minute of activity, to make sure they are kept alive. If the client or server connected to the reader has "disappeared" due to a system failure, or power failure, the reader will automatically close the connection enableing a reconnect to occur.

UDP Send ID

This new feature (if turned on) causes the reader to prepend all udp transmissions with the reader id, followed by a colon. This can be used for identifying udp receipts by reader id in your application program without looking up the ip address.

Smaller Packet Count

Version 3.0 now buffers reader data and does not transmit that data until a minimum of 4ms of inactivity occurs. In most cases, this causes the tcp transmission of reader packets to occur "as a whole". Prior versions of the tcp firmware simply transmitted packets as they were ready, causing the tcp layer to sometimes split up these packets into multiple transmissions. In most cases, using version 3.0, there will be one packet sent for each reader transmission.

Flash Loading Version 3.0

Version 3.0 can be downloaded from the Flash Download page. Any of the tcp/ip utility programs can be used to download version 3.0 into the readers, however please read application note 021 "Tcp/ip Errata" before reflashing the readers for important information concerning flash downloading.

Version 3.0 Utility Program

The Version 3.0 utility program can be found on the software page. Please note that Version 3.0 utility is required to reprogram Version 3.0 readers. This utility can also reprogram earlier reader versions as well. Note that for Version 3.0 readers, a password is required when using the "resolve dup" feature. This is new to Version 3.0.