Confidential



Reader Re-Engineering

Technical Changes (Radio) describing differences between the original and new devices.

There are only minor changes to the readers all the mechanical aspects of the readers are the same in that a customer would not be aware if they were using a new or original device. As far as the radio is concerned the RFID IC and antenna are the same, it is worth mentioning that the new readers also read HID tokens (though at the same 125kHz frequency as the HITAG tokens that they both read), the only main change is that the microcontroller has changed as per the below table.

The table below details the sales code changes of the products and what hardware has been introduced or changes.

| | Old product | New product |
|-------------------------|----------------------------------|--|
| Sales codes | | |
| P50 Mullion | 345-110-US | 345-220-US |
| | | |
| P75 | 373-110-US | 373-110-US (no change) |
| KP75 | 375-110-US | 375-110-US (no change) |
| Radio capabilities | | |
| | Reads 125kHz HITAG format tokens | Reads 125kHz HITAG and HID format tokens |
| Hardware | | |
| RFID reader IC | NXP HTRC110 | NXP HTRC110 (no change) |
| Antenna for RFID reader | Wound enamelled wire | Wound enamelled wire (no change) |
| Microcontroller | NXP MC68HC908QY4 | NXP LPC1114 |