

## 1 Y SOFT CARD READER PROTOCOLS

Reader protocol can be specified if different than default operation mode of the card reader is required. The table below shows a list of card readers and their respective protocols.

The first listed protocol in **bold** is the default one. If any other than listed protocol is selected then the selection may be invalid and the default protocol will be used.

Protocols listed in *italics* are special testing protocols intended as an aid for card testing and should not be used for user identification because some functional limitations may apply.

**Please note that the list is cross-platform (TP/UL/USBv2/USBv3/EPA) and may contain readers that are not currently available on every Y Soft product or it may contain readers that are no longer available but need to be supported for backward compatibility.**

List of supported readers and protocols as of LibReader ver. **1.3.38**:

Reader	Available protocols
B-010 - RFID 125 KHz	<b>Protocol 4 - GID 120</b> Protocol 2 - Generic serial 96008N1 Protocol 148 - Custom 11/001 Protocol 150 - Custom 11/003 Protocol 170 - Custom 13/001 Protocol 171 - Custom 13/002

Reader	Available protocols
B-015 - Reader 3 LF	<p><b>Protocol 1220 - LF UIN</b></p> <p>Protocol 90 - EM4000 compatible</p> <p>Protocol 94 - EM4000 compatible cont.</p> <p>Protocol 88 - EM4000 compatible w/LRC (96008N1 compatible)</p> <p>Protocol 91 - Prox-lite/Casi-Rusco</p> <p>Protocol 92 - Paradox/PosiProx</p> <p>Protocol 89 - Nedap</p> <p>Protocol 87 - Awid</p> <p>Protocol 86 - Pyramid</p> <p>Protocol 85 - Deister</p> <p>Protocol 84 - Datasec</p> <p>Protocol 83 - G-Prox</p> <p>Protocol 82 - ioProx label</p> <p>Protocol 121 - EM4050 f/64 std. read mode</p> <p>Protocol 96 - PAC/KeyPAC</p> <p>Protocol 120 - URMET/FDI</p> <p>Protocol 1601 - Cardax/Gallagher</p> <p>Protocol 1602 - Jablotron</p> <p><i>Protocol 117 - ASK/FSK testing</i></p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 170 - Custom 13/001</p> <p>Protocol 171 - Custom 13/002</p> <p>Protocol 177 - Custom 13/008</p>

Reader	Available protocols
B-016 - 125kHz ASK FSK	<p><b>Protocol 1220 - LF UIN</b></p> <p>Protocol 90 - EM4000 compatible</p> <p>Protocol 94 - EM4000 compatible cont.</p> <p>Protocol 88 - EM4000 compatible w/LRC (96008N1 compatible)</p> <p>Protocol 91 - Prox-lite/Casi-Rusco</p> <p>Protocol 92 - Paradox/PosiProx</p> <p>Protocol 89 - Nedap</p> <p>Protocol 87 - Awid</p> <p>Protocol 86 - Pyramid</p> <p>Protocol 85 - Deister</p> <p>Protocol 84 - Datasec</p> <p>Protocol 83 - G-Prox</p> <p>Protocol 82 - ioProx label</p> <p>Protocol 121 - EM4050 f/64 std. read mode</p> <p>Protocol 96 - PAC/KeyPAC</p> <p>Protocol 120 - URMET/FDI</p> <p>Protocol 1601 - Cardax/Gallagher</p> <p>Protocol 1602 - Jablotron</p> <p><i>Protocol 117 - ASK/FSK testing</i></p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 170 - Custom 13/001</p> <p>Protocol 171 - Custom 13/002</p> <p>Protocol 177 - Custom 13/008</p>
B-017 - Multireader LF	<p><b>Protocol 1220 - LF UIN</b></p> <p>Protocol 125 - EM4000 compat. + HID Prox Wallb.</p> <p>Protocol 90 - EM4000 compatible</p> <p>Protocol 94 - EM4000 compatible cont.</p> <p>Protocol 88 - EM4000 compatible w/LRC (96008N1 compatible)</p> <p>Protocol 91 - Prox-lite/Casi-Rusco</p> <p>Protocol 92 - Paradox/PosiProx</p> <p>Protocol 89 - Nedap</p> <p>Protocol 87 - Awid</p> <p>Protocol 86 - Pyramid</p> <p>Protocol 85 - Deister</p> <p>Protocol 84 - Datasec</p> <p>Protocol 83 - G-Prox</p> <p>Protocol 82 - ioProx label</p> <p>Protocol 121 - EM4050 f/64 std. read mode</p> <p>Protocol 96 - PAC/KeyPAC</p> <p>Protocol 120 - URMET/FDI</p> <p>Protocol 1601 - Cardax/Gallagher</p> <p>Protocol 1602 - Jablotron</p>

Reader	Available protocols
	<p>Protocol 35 - HID Prox Wallb.</p> <p>Protocol 5 - HID Prox W26</p> <p>Protocol 6 - HID Prox W27</p> <p>Protocol 7 - HID Prox W32</p> <p>Protocol 8 - HID Prox W34</p> <p>Protocol 9 - HID Prox W37</p> <p>Protocol 27 - HID Prox W40</p> <p>Protocol 46 - HID Prox W40 w/o par.</p> <p>Protocol 10 - HID Prox W44</p> <p>Protocol 56 - HID Prox Wallb. continuous</p> <p>Protocol 1005 - HID Prox UDF W26</p> <p>Protocol 1006 - HID Prox UDF W27</p> <p>Protocol 1007 - HID Prox UDF W32</p> <p>Protocol 1008 - HID Prox UDF W34</p> <p>Protocol 1009 - HID Prox UDF W37</p> <p>Protocol 1027 - HID Prox UDF W40</p> <p>Protocol 1046 - HID Prox UDF W40 w/o par.</p> <p>Protocol 1010 - HID Prox UDF W44</p> <p>Protocol 1035 - HID Prox UDF Wallb.</p> <p>Protocol 1056 - HID Prox UDF Wallb. cont.</p> <p><i>Protocol 117 - ASK/FSK testing</i></p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 157 - Custom 11/010</p> <p>Protocol 170 - Custom 13/001</p> <p>Protocol 171 - Custom 13/002</p> <p>Protocol 174 - Custom 13/005</p> <p>Protocol 177 - Custom 13/008</p> <p>Protocol 179 - Custom 13/010</p>

Reader	Available protocols
B-018 - Multireader LF + HF v2	<p><b>Protocol 1220 - LF UIN + HF UIN</b></p> <p>Protocol 105 - HF UIN only</p> <p>Protocol 1221 - LF UIN only</p> <p>Protocol 90 - EM4000 compat.+ HF UIN</p> <p>Protocol 94 - EM4000 compat. + HF UIN cont.</p> <p>Protocol 118 - EM4000 compat.+ ISO14443A UIN</p> <p>Protocol 125 - EM4000 compat.+ HID Prox + HF UIN</p> <p>Protocol 91 - Prox-lite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax/Gallagher + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p>Protocol 35 - HID Prox Wallb. + HF UIN</p> <p>Protocol 124 - HID Prox Wallb. + HF UIN rev. endian</p> <p>Protocol 5 - HID Prox W26 + HF UIN</p> <p>Protocol 6 - HID Prox W27 + HF UIN</p> <p>Protocol 7 - HID Prox W32 + HF UIN</p> <p>Protocol 8 - HID Prox W34 + HF UIN</p> <p>Protocol 9 - HID Prox W37 + HF UIN</p> <p>Protocol 27 - HID Prox W40 + HF UIN</p> <p>Protocol 46 - HID Prox W40 w/o par. + HF UIN</p> <p>Protocol 10 - HID Prox W44 + HF UIN</p> <p>Protocol 1005 - HID Prox UDF W26 + HF UIN</p> <p>Protocol 1006 - HID Prox UDF W27 + HF UIN</p> <p>Protocol 1007 - HID Prox UDF W32 + HF UIN</p> <p>Protocol 1008 - HID Prox UDF W34 + HF UIN</p> <p>Protocol 1009 - HID Prox UDF W37 + HF UIN</p> <p>Protocol 1027 - HID Prox UDF W40 + HF UIN</p> <p>Protocol 1046 - HID Prox UDF W40 w/o par. + HF UIN</p> <p>Protocol 1010 - HID Prox UDF W44 + HF UIN</p> <p>Protocol 1035 - HID Prox UDF Wallb. + HF UIN</p> <p><i>Protocol 117 - ASK/FSK testing + HF UIN</i></p>

Reader	Available protocols
B-019 - Reader 3 MF	<p><b>Protocol 1220 - LF UIN + HF UIN</b></p> <p>Protocol 1222 - LF UIN + HF UIN rev. endian</p> <p>Protocol 1221 - LF UIN only</p> <p>Protocol 105 - HF UIN only</p> <p>Protocol 106 - HF UIN only rev. endian</p> <p>Protocol 1500 - HF UIN only continuous</p> <p>Protocol 1518 - ISO14443A UIN only</p> <p>Protocol 90 - EM4000 compat.+ HF UIN</p> <p>Protocol 94 - EM4000 compat. + HF UIN cont.</p> <p>Protocol 118 - EM4000 compat.+ ISO14443A UIN</p> <p>Protocol 91 - Prox-lite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax/Gallagher + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p><i>Protocol 117 - ASK/FSK testing + HF UIN</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 166 - Custom 12/005</p> <p>Protocol 168 - Custom 12/007</p> <p>Protocol 169 - Custom 12/008</p> <p>Protocol 188 - Custom 14/002</p> <p>Protocol 190 - Custom 14/004</p> <p>Protocol 191 - Custom 14/005</p> <p>Protocol 192 - Custom 15/001</p>

Reader	Available protocols
B-020 - Mot/Ind W26	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto Protocol 172 - Custom 13/003
B-020-01 - Mot/Ind CEZ	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto
B-020-02 - Mot/Ind HZS Ostrava	<b>Protocol 35 - Wiegand all bits auto</b>
B-020-03 - Mot/Ind SCVK	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto
B-020-04 - Mot/Ind custom	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto
B-020-05 - Mot/Ind custom	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto
B-021 - Mot/Ind W27	<b>Protocol 6 - Wiegand 27</b> Protocol 35 - Wiegand all bits auto
B-022 - Mot/Ind ABA Track II	<b>Protocol 19 - ABA 2</b>
B-024 - Mot/Ind Lite	<b>Protocol 5 - Wiegand 26</b> Protocol 35 - Wiegand all bits auto
B-026 - Mot/Ind KANTECH	<b>Protocol 7 - Wiegand 32</b>

Reader	Available protocols
B-027 - Indala UIN	<p><b>Protocol 1101 - UIN1 short</b></p> <p>Protocol 1102 - UIN2 short</p> <p>Protocol 1103 - UIN1 long</p> <p>Protocol 1104 - UIN2 long</p> <p>Protocol 1105 - W26 - format 10022</p> <p>Protocol 1106 - W26 Wallb.- format 10022</p> <p>Protocol 1107 - W27 - format 10251</p> <p>Protocol 1108 - W27 Wallb.- format 10251</p> <p>Protocol 1109 - ABA2 - format 11037</p> <p>Protocol 1110 - Lite - format 17531</p> <p>Protocol 1111 - Lite Wallb.- format 17531</p> <p>Protocol 1112 - Kantech - format 15024</p> <p>Protocol 1113 - ESMI - format 1771x</p> <p>Protocol 1114 - ECR W26 Wallb. - format 10324</p> <p>Protocol 1115 - ECR ABA2 - format 11045</p> <p>Protocol 1130 - ASP+ default key Wiegand</p> <p>Protocol 1131 - ASP+ default key ABA2</p> <p>Protocol 1132 - ASP+ default key Serial</p> <p>Protocol 172 - Custom 13/003</p> <p>Protocol 181 - Custom 13/012</p> <p>Protocol 182 - Custom 13/013</p> <p>Protocol 183 - Custom 13/014</p> <p>Protocol 184 - Custom 13/015</p>



Reader	Available protocols
B-028 - Reader 3 Indala	<b>Protocol 1101 - UIN1 short</b> Protocol 1102 - UIN2 short Protocol 1103 - UIN1 long Protocol 1104 - UIN2 long Protocol 1105 - W26 - format 10022 Protocol 1106 - W26 Wallb.- format 10022 Protocol 1107 - W27 - format 10251 Protocol 1108 - W27 Wallb.- format 10251 Protocol 1109 - ABA2 - format 11037 Protocol 1110 - Lite - format 17531 Protocol 1111 - Lite Wallb.- format 17531 Protocol 1112 - Kantech - format 15024 Protocol 1113 - ESMI - format 1771x Protocol 1114 - ECR W26 Wallb. - format 10324 Protocol 1115 - ECR ABA2 - format 11045 Protocol 1130 - ASP+ default key Wiegand Protocol 1131 - ASP+ default key ABA2 Protocol 1132 - ASP+ default key Serial Protocol 172 - Custom 13/003 Protocol 181 - Custom 13/012 Protocol 182 - Custom 13/013 Protocol 183 - Custom 13/014 Protocol 184 - Custom 13/015
B-030 - HID Prox	<b>Protocol 35 - Wiegand all bits auto</b> Protocol 5 - Wiegand 26 Protocol 6 - Wiegand 27 Protocol 7 - Wiegand 32 Protocol 8 - Wiegand 34 Protocol 9 - Wiegand 37 Protocol 27 - Wiegand 40 Protocol 46 - Wiegand 40 w/o parity Protocol 10 - Wiegand 44 Protocol 56 - Wiegand all bits continuous Protocol 157 - Custom 11/010 Protocol 174 - Custom 13/005 Protocol 179 - Custom 13/010

Reader	Available protocols
B-031 - HID UDF	<b>Protocol 5 - Wiegand 26</b> Protocol 6 - Wiegand 27 Protocol 7 - Wiegand 32 Protocol 8 - Wiegand 34 Protocol 9 - Wiegand 37 Protocol 27 - Wiegand 40 Protocol 46 - Wiegand 40 w/o parity Protocol 10 - Wiegand 44 Protocol 35 - Wiegand all bits auto Protocol 56 - Wiegand all bits continuous
B-033 - HID iClass	<b>Protocol 35 - Wiegand all bits auto</b> Protocol 5 - Wiegand 26 Protocol 6 - Wiegand 27 Protocol 7 - Wiegand 32 Protocol 8 - Wiegand 34 Protocol 9 - Wiegand 37 Protocol 27 - Wiegand 40 Protocol 46 - Wiegand 40 w/o parity Protocol 10 - Wiegand 44 Protocol 37 - iClass UIN Protocol 168 - Custom 12/007
B-034 - HID Felica	<b>Protocol 35 - Felica UIN</b>
B-035 - Prox-lite	<b>Protocol 48 - Prox-lite</b>
B-036 - NexWatch/NexKey	<b>Protocol 2 - Card UIN</b>

Reader	Available protocols
B-037 - Legic Advant + HID Prox	<p><b>Protocol 49 - Legic UIN+HID Prox</b></p> <p>Protocol 119 - Legic UIN only</p> <p>Protocol 35 - HID Prox only</p> <p>Protocol 113 - Legic UIN rev. endian+HID Prox</p> <p>Protocol 74 - Legic Advant UIN+HID Prox</p> <p>Protocol 107 - Legic Prime UIN+HID Prox</p> <p>Protocol 80 - FIPS201 ID from PIV-II+HID Prox</p> <p>Protocol 108 - Legic short KGH seg. 1+HID Prox</p> <p>Protocol 109 - Legic short KGH seg. 2+HID Prox</p> <p>Protocol 110 - Legic short KGH seg. 3+HID Prox</p> <p>Protocol 111 - Legic short KGH seg. 4+HID Prox</p> <p>Protocol 75 - Interflex card ID+HID Prox</p> <p>Protocol 64 - Legic KGH seg. 1+HID Prox</p> <p>Protocol 65 - Legic KGH seg. 2+HID Prox</p> <p>Protocol 66 - Legic KGH seg. 3+HID Prox</p> <p>Protocol 67 - Legic KGH seg. 4+HID Prox</p> <p>Protocol 29 - Legic KGH seg. 1 compat.+HID Prox</p> <p>Protocol 30 - Legic KGH seg. 2 compat.+HID Prox</p> <p>Protocol 31 - Legic KGH seg. 3 compat.+HID Prox</p> <p>Protocol 32 - Legic KGH seg. 4 compat.+HID Prox</p> <p>Protocol 140 - Custom 08/004</p>

Reader	Available protocols
B-038 - HID Prox v3	<p><b>Protocol 35 - Wiegand all bits auto</b></p> <p>Protocol 5 - Wiegand 26</p> <p>Protocol 6 - Wiegand 27</p> <p>Protocol 7 - Wiegand 32</p> <p>Protocol 8 - Wiegand 34</p> <p>Protocol 9 - Wiegand 37</p> <p>Protocol 27 - Wiegand 40</p> <p>Protocol 46 - Wiegand 40 w/o parity</p> <p>Protocol 10 - Wiegand 44</p> <p>Protocol 56 - Wiegand all bits continuous</p> <p>Protocol 1005 - UDF Wiegand 26</p> <p>Protocol 1006 - UDF Wiegand 27</p> <p>Protocol 1007 - UDF Wiegand 32</p> <p>Protocol 1008 - UDF Wiegand 34</p> <p>Protocol 1009 - UDF Wiegand 37</p> <p>Protocol 1027 - UDF Wiegand 40</p> <p>Protocol 1046 - UDF Wiegand 40 w/o parity</p> <p>Protocol 1010 - UDF Wiegand 44</p> <p>Protocol 1035 - UDF Wiegand all bits auto</p> <p>Protocol 1056 - UDF Wiegand all bits continuous</p> <p>Protocol 157 - Custom 11/010</p> <p>Protocol 174 - Custom 13/005</p> <p>Protocol 179 - Custom 13/010</p>
B-039 - Reader 3 LF+	<p><b>Protocol 1220 - LF UIN</b></p> <p>Protocol 125 - EM4000 compat. + HID Prox Wallb.</p> <p>Protocol 90 - EM4000 compatible</p> <p>Protocol 94 - EM4000 compatible cont.</p> <p>Protocol 88 - EM4000 compatible w/LRC (96008N1 compatible)</p> <p>Protocol 91 - Proxlite/Casi-Rusco</p> <p>Protocol 92 - Paradox/PosiProx</p> <p>Protocol 89 - Nedap</p> <p>Protocol 87 - Awid</p> <p>Protocol 86 - Pyramid</p> <p>Protocol 85 - Deister</p> <p>Protocol 84 - Datasec</p> <p>Protocol 83 - G-Prox</p> <p>Protocol 82 - ioProx label</p> <p>Protocol 121 - EM4050 f/64 std. read mode</p> <p>Protocol 96 - PAC/KeyPAC</p> <p>Protocol 120 - URMET/FDI</p> <p>Protocol 1601 - Cardax/Gallagher</p> <p>Protocol 1602 - Jablotron</p> <p>Protocol 35 - HID Prox Wallb.</p>

Reader	Available protocols
	<p>Protocol 5 - HID Prox W26</p> <p>Protocol 6 - HID Prox W27</p> <p>Protocol 7 - HID Prox W32</p> <p>Protocol 8 - HID Prox W34</p> <p>Protocol 9 - HID Prox W37</p> <p>Protocol 27 - HID Prox W40</p> <p>Protocol 46 - HID Prox W40 w/o par.</p> <p>Protocol 10 - HID Prox W44</p> <p>Protocol 56 - HID Prox Wallb. continuous</p> <p>Protocol 1005 - HID Prox UDF W26</p> <p>Protocol 1006 - HID Prox UDF W27</p> <p>Protocol 1007 - HID Prox UDF W32</p> <p>Protocol 1008 - HID Prox UDF W34</p> <p>Protocol 1009 - HID Prox UDF W37</p> <p>Protocol 1027 - HID Prox UDF W40</p> <p>Protocol 1046 - HID Prox UDF W40 w/o par.</p> <p>Protocol 1010 - HID Prox UDF W44</p> <p>Protocol 1035 - HID Prox UDF Wallb.</p> <p>Protocol 1056 - HID Prox UDF Wallb. cont.</p> <p><i>Protocol 117 - ASK/FSK testing</i></p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 157 - Custom 11/010</p> <p>Protocol 170 - Custom 13/001</p> <p>Protocol 171 - Custom 13/002</p> <p>Protocol 174 - Custom 13/005</p> <p>Protocol 177 - Custom 13/008</p> <p>Protocol 179 - Custom 13/010</p>
B-040 - MIFARE	<p><b>Protocol 25 - Mifare UIN</b></p> <p>Protocol 106 - Mifare UIN rev. endian</p> <p>Protocol 100 - Mifare UIN continuous</p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 169 - Custom 12/008</p> <p>Protocol 190 - Custom 14/004</p>

Reader	Available protocols
B-040-01 - MIFARE CEZ	<b>Protocol 130 - Custom 07/001</b> Protocol 25 - Mifare UIN
B-040-02 - Mifare custom	<b>Protocol 2 - Card ID</b>
B-040-03 - Mifare custom	<b>Protocol 158 - Custom 11/011</b> Protocol 25 - Mifare UIN
B-041 - MultiReader LF + HF	<b>Protocol 1220 - LF UIN + HF UIN</b> Protocol 90 - EM4000 compat.+ HF UIN Protocol 94 - EM4000 compat. + HF UIN cont. Protocol 118 - EM4000 compat.+ ISO14443A UIN Protocol 1221 - LF UIN only Protocol 105 - HF UIN only Protocol 91 - Prox-lite/Casi-Rusco + HF UIN Protocol 92 - Paradox/PosiProx + HF UIN Protocol 89 - Nedap + HF UIN Protocol 87 - Awid + HF UIN Protocol 86 - Pyramid + HF UIN Protocol 85 - Deister + HF UIN Protocol 84 - Datasec + HF UIN Protocol 83 - G-Prox + HF UIN Protocol 82 - ioProx label + HF UIN Protocol 121 - EM4050 f/64 std. mode + HF UIN Protocol 96 - PAC/KeyPAC + HF UIN Protocol 120 - URMET/FDI + HF UIN Protocol 1601 - Cardax/Gallagher + HF UIN Protocol 1602 - Jablotron + HF UIN <i>Protocol 117 - ASK/FSK testing + HF UIN</i>
B-042 - MIFARE+RFID 125 kHz	<b>Protocol 21 - Dual RFID+Mifare</b>

Reader	Available protocols
B-044 - Legic Advant	<b>Protocol 26 - Legic UIN</b> Protocol 113 - Legic UIN rev. endian Protocol 29 - Legic KGH seg. 1 Protocol 30 - Legic KGH seg. 2 Protocol 31 - Legic KGH seg. 3 Protocol 32 - Legic KGH seg. 4 Protocol 108 - Legic short KGH seg. 1 Protocol 109 - Legic short KGH seg. 2 Protocol 110 - Legic short KGH seg. 3 Protocol 111 - Legic short KGH seg. 4 Protocol 75 - Interflex card ID Protocol 129 - Custom 06/266 Protocol 132 - Custom 07/003 Protocol 134 - Custom 07/005 Protocol 140 - Custom 08/004 Protocol 141 - Custom 08/005 Protocol 151 - Custom 11/004 Protocol 153 - Custom 11/006 Protocol 154 - Custom 11/007 Protocol 156 - Custom 11/009 Protocol 163 - Custom 12/002 Protocol 165 - Custom 12/004
B-045 - MULTI ISO	<b>Protocol 44 - Multi ISO UIN</b> Protocol 106 - UIN rev. endian Protocol 72 - ASK-RFID UIN Protocol 146 - Custom 10/004 Protocol 186 - Custom 13/017
B-046 - UHF ETSI	<b>Protocol 126 - ISO-18000 Type C UIN</b> Protocol 187 - Custom 14/001
B-047 - Reader 3 Multi ISO	<b>Protocol 44 - Multi ISO UIN</b> Protocol 106 - UIN rev. endian Protocol 72 - ASK-RFID UIN Protocol 146 - Custom 10/004 Protocol 186 - Custom 13/017

Reader	Available protocols
B-049 - Legic Advant v2	<p><b>Protocol 49 - Legic UIN</b></p> <p>Protocol 113 - Legic UIN rev. endian</p> <p>Protocol 74 - Legic Advant UIN</p> <p>Protocol 107 - Legic Prime UIN</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 64 - Legic KGH seg. 1</p> <p>Protocol 65 - Legic KGH seg. 2</p> <p>Protocol 66 - Legic KGH seg. 3</p> <p>Protocol 67 - Legic KGH seg. 4</p> <p>Protocol 29 - Legic KGH seg. 1 compat.</p> <p>Protocol 30 - Legic KGH seg. 2 compat.</p> <p>Protocol 31 - Legic KGH seg. 3 compat.</p> <p>Protocol 32 - Legic KGH seg. 4 compat.</p> <p>Protocol 108 - Legic short KGH seg. 1</p> <p>Protocol 109 - Legic short KGH seg. 2</p> <p>Protocol 110 - Legic short KGH seg. 3</p> <p>Protocol 111 - Legic short KGH seg. 4</p> <p>Protocol 75 - Interflex card ID</p> <p>Protocol 129 - Custom 06/266</p> <p>Protocol 132 - Custom 07/003</p> <p>Protocol 134 - Custom 07/005</p> <p>Protocol 140 - Custom 08/004</p> <p>Protocol 141 - Custom 08/005</p> <p>Protocol 151 - Custom 11/004</p> <p>Protocol 153 - Custom 11/006</p> <p>Protocol 154 - Custom 11/007</p> <p>Protocol 156 - Custom 11/009</p> <p>Protocol 159 - Custom 11/012</p> <p>Protocol 163 - Custom 12/002</p> <p>Protocol 165 - Custom 12/004</p> <p>Protocol 173 - Custom 13/004</p> <p>Protocol 175 - Custom 13/006</p>
B-050 - Unique	<p><b>Protocol 14 - All tags slow</b></p> <p>Protocol 15 - IDROA</p> <p>Protocol 16 - IDROB</p> <p>Protocol 17 - IDROC</p> <p>Protocol 18 - IDROD</p> <p>Protocol 28 - IDROE</p> <p>Protocol 51 - IDROG</p> <p>Protocol 136 - Custom 07/007</p> <p>Protocol 189 - Custom 14/003</p>



Reader	Available protocols
B-051 - Reader 3 Unique	<b>Protocol 14 - All tags slow</b> Protocol 15 - IDROA Protocol 16 - IDROB Protocol 17 - IDROC Protocol 18 - IDROD Protocol 28 - IDROE Protocol 51 - IDROG Protocol 136 - Custom 07/007 Protocol 189 - Custom 14/003
B-052 - TIRIS 134kHz	<b>Protocol 22 - Tiris</b>
B-053 - Idesco	<b>Protocol 81 - Idesco ID-code</b>
B-054 - Reader 3 TIRIS	<b>Protocol 22 - Tiris</b>
B-060 - COTAG	<b>Protocol 23 - Cotag</b> Protocol 97 - Cotag no batt. check Protocol 180 - Custom 13/011
B-061 - Reader 3 Cotag	<b>Protocol 23 - Cotag</b> Protocol 97 - Cotag no batt. check Protocol 180 - Custom 13/011
B-062 - ID-KARTA	<b>Protocol 2 - Generic serial</b>
B-063 - Reader 3 Inside Contactless	<b>Protocol 68 - Inside Contactless UIN</b> Protocol 69 - ISO 14443A-3 UIN Protocol 70 - ISO 14443B-3 UIN Protocol 71 - ISO 15693-3 UIN Protocol 72 - ASK-RFID UIN Protocol 73 - Felica UIN Protocol 143 - Custom 10/001 Protocol 146 - Custom 10/004 Protocol 186 - Custom 13/017
B-065 - Reader 3 MF+	<b>Protocol 1220 - LF UIN + HF UIN</b> Protocol 1222 - LF UIN + HF UIN rev. endian Protocol 1221 - LF UIN only Protocol 105 - HF UIN only Protocol 106 - HF UIN only rev. endian Protocol 1500 - HF UIN only continuous Protocol 1518 - ISO14443A UIN only Protocol 125 - EM4000 compat.+ HID Prox + HF UIN Protocol 90 - EM4000 compat.+ HF UIN Protocol 94 - EM4000 compat. + HF UIN cont. Protocol 118 - EM4000 compat.+ ISO14443A UIN

Reader	Available protocols
	<p>Protocol 91 - Proxlite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax/Gallagher + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p>Protocol 35 - HID Prox + HF UIN</p> <p>Protocol 124 - HID Prox + HF UIN rev. endian</p> <p>Protocol 1035 - HID Prox UDF + HF UIN</p> <p>Protocol 1201 - HID iClass + ISO14443A UIN compat.</p> <p>Protocol 1202 - HID iClass + HID Prox + ISO14443A UIN compat.</p> <p>Protocol 1203 - HID iClass + ISO14443A UIN</p> <p>Protocol 1204 - HID iClass + HID Prox + ISO14443A UIN</p> <p>Protocol 1210 - HID iClass + HID SIO</p> <p>Protocol 1211 - HID SIO only</p> <p>Protocol 1212 - HID iClass + HID SIO + HID Prox</p> <p>Protocol 1213 - HID iClass + HID SIO + HID Prox + EM4000</p> <p>Protocol 37 - HID iClass UIN</p> <p>Protocol 76 - HID iClass UIN + HID Prox</p> <p>Protocol 93 - HID Prox only</p> <p>Protocol 114 - EM4000 compatible only</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 1070 - CEPAS CAN</p> <p><i>Protocol 117 - LF testing + HID SIO + HF UIN</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 166 - Custom 12/005</p> <p>Protocol 168 - Custom 12/007</p>

Reader	Available protocols
	Protocol 169 - Custom 12/008 Protocol 188 - Custom 14/002 Protocol 190 - Custom 14/004 Protocol 191 - Custom 14/005 Protocol 192 - Custom 15/001
B-066 - HID Prox+HID iClass	<b>Protocol 35 - Wiegand all bits auto</b> Protocol 37 - iClass UIN Protocol 76 - iClass UIN + Wieg. all bits Protocol 77 - Wieg. all bits + iClass UIN Protocol 5 - Wiegand 26 Protocol 6 - Wiegand 27 Protocol 7 - Wiegand 32 Protocol 8 - Wiegand 34 Protocol 9 - Wiegand 37 Protocol 27 - Wiegand 40 Protocol 46 - Wiegand 40 w/o parity Protocol 10 - Wiegand 44
B-067 - Inside Contactless	<b>Protocol 68 - Inside Contactless UIN</b> Protocol 69 - ISO 14443A-3 UIN Protocol 70 - ISO 14443B-3 UIN Protocol 71 - ISO 15693-3 UIN Protocol 72 - ASK-RFID UIN Protocol 73 - Felica UIN Protocol 143 - Custom 10/001 Protocol 146 - Custom 10/004 Protocol 186 - Custom 13/017
B-071 - External reader kit	<b>Protocol 2 - Generic serial 96008N1</b> Protocol 3 - Generic serial continuous Protocol 35 - Wiegand all bits auto Protocol 5 - Wiegand 26 Protocol 6 - Wiegand 27 Protocol 7 - Wiegand 32 Protocol 8 - Wiegand 34 Protocol 9 - Wiegand 37 Protocol 27 - Wiegand 40 Protocol 46 - Wiegand 40 w/o parity Protocol 10 - Wiegand 44 Protocol 19 - ABA 2

Reader	Available protocols
B-073 - Reader 3 MF SAM	<p><b>Protocol 1220 - LF UIN + HF UIN</b></p> <p>Protocol 1222 - LF UIN + HF UIN rev. endian</p> <p>Protocol 1221 - LF UIN only</p> <p>Protocol 105 - HF UIN only</p> <p>Protocol 106 - HF UIN only rev. endian</p> <p>Protocol 1500 - HF UIN only continuous</p> <p>Protocol 1518 - ISO14443A UIN only</p> <p>Protocol 90 - EM4000 compat.+ HF UIN</p> <p>Protocol 94 - EM4000 compat. + HF UIN cont.</p> <p>Protocol 118 - EM4000 compat.+ ISO14443A UIN</p> <p>Protocol 91 - Proxlite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax/Gallagher + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p><i>Protocol 117 - ASK/FSK testing + HF UIN</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 166 - Custom 12/005</p> <p>Protocol 168 - Custom 12/007</p> <p>Protocol 169 - Custom 12/008</p> <p>Protocol 188 - Custom 14/002</p> <p>Protocol 190 - Custom 14/004</p> <p>Protocol 191 - Custom 14/005</p> <p>Protocol 192 - Custom 15/001</p> <p>Protocol 193 - Custom 17/001</p> <p>Protocol 194 - Custom 17/002</p>

Reader	Available protocols
B-074 - Reader 3 MFX	<p><b>Protocol 1220 - LF UIN + HF UIN</b></p> <p>Protocol 1223 - LF UIN + HF UIN high pwr</p> <p>Protocol 1222 - LF UIN + HF UIN rev. endian</p> <p>Protocol 1221 - LF UIN only</p> <p>Protocol 105 - HF UIN only</p> <p>Protocol 106 - HF UIN only rev. endian</p> <p>Protocol 1500 - HF UIN only continuous</p> <p>Protocol 1518 - ISO14443A UIN only</p> <p>Protocol 125 - EM4000 compat.+ HID Prox + HF UIN</p> <p>Protocol 90 - EM4000 compat.+ HF UIN</p> <p>Protocol 94 - EM4000 compat. + HF UIN cont.</p> <p>Protocol 118 - EM4000 compat.+ ISO14443A UIN</p> <p>Protocol 114 - EM4000 compatible only</p> <p>Protocol 91 - Prox-lite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p>Protocol 1603 - Keri + HF UIN</p> <p>Protocol 1604 - IDTECK + HF UIN</p> <p>Protocol 1605 - NexKey + HF UIN</p> <p>Protocol 1607 - NexKey compat. only</p> <p>Protocol 1606 - Noralsy + HF UIN</p> <p>Protocol 51 - ISO FDX-B + HF UIN</p> <p>Protocol 1140 - Indala UIN auto</p> <p>Protocol 1101 - Indala UIN1 short</p> <p>Protocol 1102 - Indala UIN2 short</p> <p>Protocol 1103 - Indala UIN1 long</p> <p>Protocol 1104 - Indala UIN2 long</p> <p>Protocol 1105 - Indala W26 - format 10022</p> <p>Protocol 1106 - Indala W26 Wallb.- format 10022</p> <p>Protocol 1107 - Indala W27 - format 10251</p> <p>Protocol 1108 - Indala W27 Wallb.- format 10251</p> <p>Protocol 1109 - Indala ABA2 - format 11037</p> <p>Protocol 1110 - Indala Lite - format 17531</p>

Reader	Available protocols
	<p>Protocol 1111 - Indala Lite Wallb.- format 17531</p> <p>Protocol 1112 - Indala Kantech - format 15024</p> <p>Protocol 1113 - Indala ESMI - format 1771x</p> <p>Protocol 1114 - Indala ECR W26 Wallb. - format 10324</p> <p>Protocol 1115 - Indala ECR ABA2 - format 11045</p> <p>Protocol 1130 - Indala ASP+ default key Wiegand</p> <p>Protocol 1131 - Indala ASP+ default key ABA2</p> <p>Protocol 1132 - Indala ASP+ default key Serial</p> <p>Protocol 16 - Hitag1/S</p> <p>Protocol 17 - Hitag2</p> <p>Protocol 18 - EM4x50 UIN</p> <p>Protocol 23 - Cotag</p> <p>Protocol 22 - Tiris</p> <p>Protocol 35 - HID Prox + HF UIN</p> <p>Protocol 124 - HID Prox + HF UIN rev. endian</p> <p>Protocol 1035 - HID Prox UDF + HF UIN</p> <p>Protocol 1201 - HID iClass + ISO14443A UIN compat.</p> <p>Protocol 1202 - HID iClass + HID Prox + ISO14443A UIN compat.</p> <p>Protocol 1203 - HID iClass + ISO14443A UIN</p> <p>Protocol 1204 - HID iClass + HID Prox + ISO14443A UIN</p> <p>Protocol 1210 - HID iClass + HID SIO</p> <p>Protocol 1211 - HID SIO only</p> <p>Protocol 1212 - HID iClass + HID SIO + HID Prox</p> <p>Protocol 1213 - HID iClass + HID SIO + HID Prox + EM4000</p> <p>Protocol 37 - HID iClass UIN</p> <p>Protocol 76 - HID iClass UIN + HID Prox</p> <p>Protocol 93 - HID Prox only</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 1070 - CEPAS CAN</p> <p>Protocol 72 - ASK-RFID UIN</p> <p><i>Protocol 117 - LF testing + HF testing</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 136 - Custom 07/007</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 146 - Custom 10/004</p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 157 - Custom 11/010</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p>

Reader	Available protocols
	Protocol 162 - Custom 12/001 Protocol 164 - Custom 12/003 Protocol 166 - Custom 12/005 Protocol 168 - Custom 12/007 Protocol 169 - Custom 12/008 Protocol 170 - Custom 13/001 Protocol 171 - Custom 13/002 Protocol 172 - Custom 13/003 Protocol 174 - Custom 13/005 Protocol 177 - Custom 13/008 Protocol 179 - Custom 13/010 Protocol 181 - Custom 13/012 Protocol 182 - Custom 13/013 Protocol 183 - Custom 13/014 Protocol 184 - Custom 13/015 Protocol 186 - Custom 13/017 Protocol 188 - Custom 14/002 Protocol 189 - Custom 14/003 Protocol 190 - Custom 14/004 Protocol 191 - Custom 14/005 Protocol 192 - Custom 15/001 Protocol 193 - Custom 17/001 Protocol 194 - Custom 17/002
B-075 - MFX Mobile+ Reader	<b>Protocol 1800 - YSoft Connect ID</b> Protocol 1801 - YSoft Connect ID + HID iClass + HID SIO Protocol 1220 - LF UIN + HF UIN Protocol 1222 - LF UIN + HF UIN rev. endian Protocol 1322 - LF UIN + Legic UIN Protocol 1320 - LF UIN + Legic UIN rev. endian Protocol 1221 - LF UIN only Protocol 105 - HF UIN only Protocol 49 - Legic UIN only Protocol 113 - Legic UIN rev. endian Protocol 74 - Legic Advant UIN Protocol 107 - Legic Prime UIN Protocol 106 - HF UIN only rev. endian Protocol 1500 - HF UIN only continuous Protocol 1518 - ISO14443A UIN only Protocol 125 - EM4000 compat.+ HID Prox + HF UIN Protocol 90 - EM4000 compat.+ HF UIN Protocol 94 - EM4000 compat. + HF UIN cont. Protocol 118 - EM4000 compat.+ ISO14443A UIN Protocol 114 - EM4000 compatible only

Reader	Available protocols
	<p>Protocol 91 - Proxlite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p>Protocol 1603 - Keri + HF UIN</p> <p>Protocol 1604 - IDTECK + HF UIN</p> <p>Protocol 1605 - NexKey + HF UIN</p> <p>Protocol 1607 - NexKey compat. only</p> <p>Protocol 1606 - Noralsy + HF UIN</p> <p>Protocol 51 - ISO FDX-B + HF UIN</p> <p>Protocol 1140 - Indala UIN auto</p> <p>Protocol 1101 - Indala UIN1 short</p> <p>Protocol 1102 - Indala UIN2 short</p> <p>Protocol 1103 - Indala UIN1 long</p> <p>Protocol 1104 - Indala UIN2 long</p> <p>Protocol 1105 - Indala W26 - format 10022</p> <p>Protocol 1106 - Indala W26 Wallb.- format 10022</p> <p>Protocol 1107 - Indala W27 - format 10251</p> <p>Protocol 1108 - Indala W27 Wallb.- format 10251</p> <p>Protocol 1109 - Indala ABA2 - format 11037</p> <p>Protocol 1110 - Indala Lite - format 17531</p> <p>Protocol 1111 - Indala Lite Wallb.- format 17531</p> <p>Protocol 1112 - Indala Kantech - format 15024</p> <p>Protocol 1113 - Indala ESMI - format 1771x</p> <p>Protocol 1114 - Indala ECR W26 Wallb. - format 10324</p> <p>Protocol 1115 - Indala ECR ABA2 - format 11045</p> <p>Protocol 1130 - Indala ASP+ default key Wiegand</p> <p>Protocol 1131 - Indala ASP+ default key ABA2</p> <p>Protocol 1132 - Indala ASP+ default key Serial</p> <p>Protocol 16 - Hitag1/S</p> <p>Protocol 17 - Hitag2</p> <p>Protocol 18 - EM4x50 UIN</p> <p>Protocol 23 - Cotag</p> <p>Protocol 22 - Tiris</p>



Reader	Available protocols
	<p>Protocol 35 - HID Prox + HF UIN</p> <p>Protocol 124 - HID Prox + HF UIN rev. endian</p> <p>Protocol 1035 - HID Prox UDF + HF UIN</p> <p>Protocol 1201 - HID iClass + ISO14443A UIN compat.</p> <p>Protocol 1202 - HID iClass + HID Prox + ISO14443A UIN compat.</p> <p>Protocol 1203 - HID iClass + ISO14443A UIN</p> <p>Protocol 1204 - HID iClass + HID Prox + ISO14443A UIN</p> <p>Protocol 1210 - HID iClass + HID SIO</p> <p>Protocol 1211 - HID SIO only</p> <p>Protocol 1212 - HID iClass + HID SIO + HID Prox</p> <p>Protocol 1213 - HID iClass + HID SIO + HID Prox + EM4000</p> <p>Protocol 37 - HID iClass UIN</p> <p>Protocol 76 - HID iClass UIN + HID Prox</p> <p>Protocol 93 - HID Prox only</p> <p>Protocol 108 - Legic short KGH seg. 1</p> <p>Protocol 109 - Legic short KGH seg. 2</p> <p>Protocol 110 - Legic short KGH seg. 3</p> <p>Protocol 111 - Legic short KGH seg. 4</p> <p>Protocol 64 - Legic KGH seg. 1</p> <p>Protocol 65 - Legic KGH seg. 2</p> <p>Protocol 66 - Legic KGH seg. 3</p> <p>Protocol 67 - Legic KGH seg. 4</p> <p>Protocol 29 - Legic KGH seg. 1 compat.</p> <p>Protocol 30 - Legic KGH seg. 2 compat.</p> <p>Protocol 31 - Legic KGH seg. 3 compat.</p> <p>Protocol 32 - Legic KGH seg. 4 compat.</p> <p>Protocol 75 - Interflex card ID</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 1070 - CEPAS CAN</p> <p><i>Protocol 117 - LF testing + HF testing</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 129 - Custom 06/266</p> <p>Protocol 132 - Custom 07/003</p> <p>Protocol 134 - Custom 07/005</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 136 - Custom 07/007</p> <p>Protocol 140 - Custom 08/004</p> <p>Protocol 141 - Custom 08/005</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 151 - Custom 11/004</p> <p>Protocol 152 - Custom 11/005</p>

Reader	Available protocols
	Protocol 153 - Custom 11/006 Protocol 154 - Custom 11/007 Protocol 155 - Custom 11/008 Protocol 156 - Custom 11/009 Protocol 157 - Custom 11/010 Protocol 159 - Custom 11/012 Protocol 160 - Custom 11/013 Protocol 161 - Custom 11/014 Protocol 162 - Custom 12/001 Protocol 163 - Custom 12/002 Protocol 164 - Custom 12/003 Protocol 165 - Custom 12/004 Protocol 168 - Custom 12/007 Protocol 169 - Custom 12/008 Protocol 170 - Custom 13/001 Protocol 171 - Custom 13/002 Protocol 172 - Custom 13/003 Protocol 173 - Custom 13/004 Protocol 174 - Custom 13/005 Protocol 175 - Custom 13/006 Protocol 177 - Custom 13/008 Protocol 178 - Custom 13/009 Protocol 179 - Custom 13/010 Protocol 181 - Custom 13/012 Protocol 182 - Custom 13/013 Protocol 183 - Custom 13/014 Protocol 184 - Custom 13/015 Protocol 188 - Custom 14/002 Protocol 189 - Custom 14/003 Protocol 190 - Custom 14/004 Protocol 191 - Custom 14/005 Protocol 192 - Custom 15/001 Protocol 193 - Custom 17/001
B-076 - MFX Mobile Reader	<b>Protocol 1800 - YSoft Connect ID</b> Protocol 1220 - LF UIN + HF UIN Protocol 1222 - LF UIN + HF UIN rev. endian Protocol 1322 - LF UIN + Legic UIN Protocol 1320 - LF UIN + Legic UIN rev. endian Protocol 1221 - LF UIN only Protocol 105 - HF UIN only Protocol 49 - Legic UIN only Protocol 113 - Legic UIN rev. endian Protocol 74 - Legic Advant UIN

Reader	Available protocols
	<p>Protocol 107 - Legic Prime UIN</p> <p>Protocol 106 - HF UIN only rev. endian</p> <p>Protocol 1500 - HF UIN only continuous</p> <p>Protocol 1518 - ISO14443A UIN only</p> <p>Protocol 125 - EM4000 compat.+ HID Prox + HF UIN</p> <p>Protocol 90 - EM4000 compat.+ HF UIN</p> <p>Protocol 94 - EM4000 compat. + HF UIN cont.</p> <p>Protocol 118 - EM4000 compat.+ ISO14443A UIN</p> <p>Protocol 114 - EM4000 compatible only</p> <p>Protocol 91 - Prox-lite/Casi-Rusco + HF UIN</p> <p>Protocol 92 - Paradox/PosiProx + HF UIN</p> <p>Protocol 89 - Nedap + HF UIN</p> <p>Protocol 87 - Awid + HF UIN</p> <p>Protocol 86 - Pyramid + HF UIN</p> <p>Protocol 85 - Deister + HF UIN</p> <p>Protocol 84 - Datasec + HF UIN</p> <p>Protocol 83 - G-Prox + HF UIN</p> <p>Protocol 82 - ioProx label + HF UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + HF UIN</p> <p>Protocol 96 - PAC/KeyPAC + HF UIN</p> <p>Protocol 120 - URMET/FDI + HF UIN</p> <p>Protocol 1601 - Cardax + HF UIN</p> <p>Protocol 1602 - Jablotron + HF UIN</p> <p>Protocol 1603 - Keri + HF UIN</p> <p>Protocol 1604 - IDTECK + HF UIN</p> <p>Protocol 1605 - NexKey + HF UIN</p> <p>Protocol 1607 - NexKey compat. only</p> <p>Protocol 1606 - Noralsy + HF UIN</p> <p>Protocol 51 - ISO FDX-B + HF UIN</p> <p>Protocol 1140 - Indala UIN auto</p> <p>Protocol 1101 - Indala UIN1 short</p> <p>Protocol 1102 - Indala UIN2 short</p> <p>Protocol 1103 - Indala UIN1 long</p> <p>Protocol 1104 - Indala UIN2 long</p> <p>Protocol 1105 - Indala W26 - format 10022</p> <p>Protocol 1106 - Indala W26 Wallb.- format 10022</p> <p>Protocol 1107 - Indala W27 - format 10251</p> <p>Protocol 1108 - Indala W27 Wallb.- format 10251</p> <p>Protocol 1109 - Indala ABA2 - format 11037</p> <p>Protocol 1110 - Indala Lite - format 17531</p> <p>Protocol 1111 - Indala Lite Wallb.- format 17531</p> <p>Protocol 1112 - Indala Kantech - format 15024</p> <p>Protocol 1113 - Indala ESMI - format 1771x</p> <p>Protocol 1114 - Indala ECR W26 Wallb. - format 10324</p>

Reader	Available protocols
	<p>Protocol 1115 - Indala ECR ABA2 - format 11045</p> <p>Protocol 1130 - Indala ASP+ default key Wiegand</p> <p>Protocol 1131 - Indala ASP+ default key ABA2</p> <p>Protocol 1132 - Indala ASP+ default key Serial</p> <p>Protocol 16 - Hitag1/S</p> <p>Protocol 17 - Hitag2</p> <p>Protocol 18 - EM4x50 UIN</p> <p>Protocol 23 - Cotag</p> <p>Protocol 22 - Tiris</p> <p>Protocol 35 - HID Prox + HF UIN</p> <p>Protocol 124 - HID Prox + HF UIN rev. endian</p> <p>Protocol 1035 - HID Prox UDF + HF UIN</p> <p>Protocol 37 - HID iClass UIN</p> <p>Protocol 76 - HID iClass UIN + HID Prox</p> <p>Protocol 93 - HID Prox only</p> <p>Protocol 108 - Legic short KGH seg. 1</p> <p>Protocol 109 - Legic short KGH seg. 2</p> <p>Protocol 110 - Legic short KGH seg. 3</p> <p>Protocol 111 - Legic short KGH seg. 4</p> <p>Protocol 64 - Legic KGH seg. 1</p> <p>Protocol 65 - Legic KGH seg. 2</p> <p>Protocol 66 - Legic KGH seg. 3</p> <p>Protocol 67 - Legic KGH seg. 4</p> <p>Protocol 29 - Legic KGH seg. 1 compat.</p> <p>Protocol 30 - Legic KGH seg. 2 compat.</p> <p>Protocol 31 - Legic KGH seg. 3 compat.</p> <p>Protocol 32 - Legic KGH seg. 4 compat.</p> <p>Protocol 75 - Interflex card ID</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 1070 - CEPAS CAN</p> <p><i>Protocol 117 - LF testing + HF testing</i></p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 129 - Custom 06/266</p> <p>Protocol 132 - Custom 07/003</p> <p>Protocol 134 - Custom 07/005</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 136 - Custom 07/007</p> <p>Protocol 140 - Custom 08/004</p> <p>Protocol 141 - Custom 08/005</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 148 - Custom 11/001</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 150 - Custom 11/003</p> <p>Protocol 151 - Custom 11/004</p>

Reader	Available protocols
	<p>Protocol 152 - Custom 11/005</p> <p>Protocol 153 - Custom 11/006</p> <p>Protocol 154 - Custom 11/007</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 156 - Custom 11/009</p> <p>Protocol 157 - Custom 11/010</p> <p>Protocol 159 - Custom 11/012</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 163 - Custom 12/002</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 165 - Custom 12/004</p> <p>Protocol 168 - Custom 12/007</p> <p>Protocol 169 - Custom 12/008</p> <p>Protocol 170 - Custom 13/001</p> <p>Protocol 171 - Custom 13/002</p> <p>Protocol 172 - Custom 13/003</p> <p>Protocol 173 - Custom 13/004</p> <p>Protocol 174 - Custom 13/005</p> <p>Protocol 175 - Custom 13/006</p> <p>Protocol 177 - Custom 13/008</p> <p>Protocol 178 - Custom 13/009</p> <p>Protocol 179 - Custom 13/010</p> <p>Protocol 181 - Custom 13/012</p> <p>Protocol 182 - Custom 13/013</p> <p>Protocol 183 - Custom 13/014</p> <p>Protocol 184 - Custom 13/015</p> <p>Protocol 188 - Custom 14/002</p> <p>Protocol 189 - Custom 14/003</p> <p>Protocol 190 - Custom 14/004</p> <p>Protocol 191 - Custom 14/005</p> <p>Protocol 192 - Custom 15/001</p> <p>Protocol 193 - Custom 17/001</p>
B-080 - Magnetic cards	<p><b>Protocol 39 - Track 2</b></p> <p>Protocol 38 - Track 1</p> <p>Protocol 40 - Track 3</p> <p>Protocol 41 - Tracks 1-2</p> <p>Protocol 42 - Tracks 2-3</p> <p>Protocol 43 - Tracks 1-2-3</p>
B-081 - Barcode - swipe	<b>Protocol 2 - Barcode</b>
B-082 - Barcode - external	<b>Protocol 2 - MIFARE</b>

Reader	Available protocols
B-083 - SmartCard reader	<b>Protocol 34 - Smartcard UIN</b> Protocol 53 - Smartcard PKCS #15 sn. Protocol 54 - SC PKCS #15 sn. with PIN1 verify Protocol 55 - SC PKCS #15 sn. with PIN2 verify Protocol 78 - PIV card Protocol 79 - Gemalto .NET and Gemalto PKI Applet Protocol 123 - CAC card Protocol 131 - Custom 07/002 Protocol 144 - Custom 10/002 Protocol 167 - Custom 12/006 Protocol 195 - Custom 18/001
B-084 - Magnetic cards v2	<b>Protocol 58 - Track 2</b> Protocol 57 - Track 1 Protocol 59 - Track 3 Protocol 60 - Tracks 1-2 Protocol 61 - Tracks 2-3 Protocol 62 - Tracks 1-3 Protocol 63 - Tracks 1-2-3 <i>Protocol 116 - Tracks 1-2-3 testing</i> Protocol 176 - Custom 13/007
B-086 - Reader 3 Magstripe	<b>Protocol 58 - Track 2</b> Protocol 57 - Track 1 Protocol 59 - Track 3 Protocol 60 - Tracks 1-2 Protocol 61 - Tracks 2-3 Protocol 62 - Tracks 1-3 Protocol 63 - Tracks 1-2-3 <i>Protocol 116 - Tracks 1-2-3 testing</i> Protocol 176 - Custom 13/007

Reader	Available protocols
B-087 - MultiReader HF	<p><b>Protocol 105 - Card UIN</b></p> <p>Protocol 118 - ISO14443A UIN only</p> <p>Protocol 106 - Card UIN rev. endian</p> <p>Protocol 100 - Card UIN continuous</p> <p>Protocol 128 - Custom 06/233</p> <p>Protocol 135 - Custom 07/006</p> <p>Protocol 145 - Custom 10/003</p> <p>Protocol 149 - Custom 11/002</p> <p>Protocol 152 - Custom 11/005</p> <p>Protocol 155 - Custom 11/008</p> <p>Protocol 160 - Custom 11/013</p> <p>Protocol 161 - Custom 11/014</p> <p>Protocol 162 - Custom 12/001</p> <p>Protocol 164 - Custom 12/003</p> <p>Protocol 166 - Custom 12/005</p> <p>Protocol 169 - Custom 12/008</p> <p>Protocol 188 - Custom 14/002</p> <p>Protocol 190 - Custom 14/004</p> <p>Protocol 191 - Custom 14/005</p> <p>Protocol 192 - Custom 15/001</p>
B-088 - Reader 3 MF and Legic	<p><b>Protocol 1322 - LF UIN + Legic UIN</b></p> <p>Protocol 1320 - LF UIN + Legic UIN rev. endian</p> <p>Protocol 49 - Legic UIN only</p> <p>Protocol 1221 - LF UIN only</p> <p>Protocol 113 - Legic UIN rev. endian</p> <p>Protocol 74 - Legic Advant UIN</p> <p>Protocol 107 - Legic Prime UIN</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 90 - EM4000 compat.+ Legic UIN</p> <p>Protocol 1349 - Legic UIN+HID Prox</p> <p>Protocol 1413 - Legic UIN rev. endian+HID Prox</p> <p>Protocol 1374 - Legic Advant UIN+HID Prox</p> <p>Protocol 1407 - Legic Prime UIN+HID Prox</p> <p>Protocol 1380 - FIPS201 ID from PIV-II+HID Prox</p> <p>Protocol 125 - EM4000 compat.+ HID Prox + Legic UIN</p> <p>Protocol 91 - Proxlite/Casi-Rusco + Legic UIN</p> <p>Protocol 92 - Paradox/PosiProx + Legic UIN</p> <p>Protocol 89 - Nedap + Legic UIN</p> <p>Protocol 87 - Awid + Legic UIN</p> <p>Protocol 86 - Pyramid + Legic UIN</p> <p>Protocol 85 - Deister + Legic UIN</p> <p>Protocol 84 - Datasec + Legic UIN</p> <p>Protocol 83 - G-Prox + Legic UIN</p>

Reader	Available protocols
	<p>Protocol 82 - ioProx label + Legic UIN</p> <p>Protocol 121 - EM4050 f/64 std. mode + Legic UIN</p> <p>Protocol 96 - PAC/KeyPAC + Legic UIN</p> <p>Protocol 120 - URMET/FDI + Legic UIN</p> <p>Protocol 1601 - Cardax/Gallagher + Legic UIN</p> <p>Protocol 1602 - Jablotron + Legic UIN</p> <p>Protocol 35 - HID Prox + Legic UIN</p> <p>Protocol 124 - HID Prox + Legic UIN rev. endian</p> <p>Protocol 1035 - HID Prox UDF + Legic UIN</p> <p>Protocol 93 - HID Prox only</p> <p>Protocol 114 - EM4000 compatible only</p> <p>Protocol 108 - Legic short KGH seg. 1</p> <p>Protocol 109 - Legic short KGH seg. 2</p> <p>Protocol 110 - Legic short KGH seg. 3</p> <p>Protocol 111 - Legic short KGH seg. 4</p> <p>Protocol 64 - Legic KGH seg. 1</p> <p>Protocol 65 - Legic KGH seg. 2</p> <p>Protocol 66 - Legic KGH seg. 3</p> <p>Protocol 67 - Legic KGH seg. 4</p> <p>Protocol 29 - Legic KGH seg. 1 compat.</p> <p>Protocol 30 - Legic KGH seg. 2 compat.</p> <p>Protocol 31 - Legic KGH seg. 3 compat.</p> <p>Protocol 32 - Legic KGH seg. 4 compat.</p> <p>Protocol 75 - Interflex card ID</p> <p>Protocol 1408 - Legic short KGH seg. 1+HID Prox</p> <p>Protocol 1409 - Legic short KGH seg. 2+HID Prox</p> <p>Protocol 1410 - Legic short KGH seg. 3+HID Prox</p> <p>Protocol 1411 - Legic short KGH seg. 4+HID Prox</p> <p>Protocol 1364 - Legic KGH seg. 1+HID Prox</p> <p>Protocol 1365 - Legic KGH seg. 2+HID Prox</p> <p>Protocol 1366 - Legic KGH seg. 3+HID Prox</p> <p>Protocol 1367 - Legic KGH seg. 4+HID Prox</p> <p>Protocol 1329 - Legic KGH seg. 1 compat.+HID Prox</p> <p>Protocol 1330 - Legic KGH seg. 2 compat.+HID Prox</p> <p>Protocol 1331 - Legic KGH seg. 3 compat.+HID Prox</p> <p>Protocol 1332 - Legic KGH seg. 4 compat.+HID Prox</p> <p>Protocol 1375 - Interflex card ID+HID Prox</p> <p><i>Protocol 117 - ASK/FSK testing + Legic UIN</i></p> <p>Protocol 129 - Custom 06/266</p> <p>Protocol 132 - Custom 07/003</p> <p>Protocol 134 - Custom 07/005</p> <p>Protocol 140 - Custom 08/004</p> <p>Protocol 141 - Custom 08/005</p> <p>Protocol 151 - Custom 11/004</p>



Reader	Available protocols
	<p>Protocol 153 - Custom 11/006</p> <p>Protocol 154 - Custom 11/007</p> <p>Protocol 156 - Custom 11/009</p> <p>Protocol 159 - Custom 11/012</p> <p>Protocol 163 - Custom 12/002</p> <p>Protocol 165 - Custom 12/004</p> <p>Protocol 173 - Custom 13/004</p> <p>Protocol 175 - Custom 13/006</p> <p>Protocol 178 - Custom 13/009</p>
B-089 - Legic Advant v3	<p><b>Protocol 49 - Legic UIN</b></p> <p>Protocol 113 - Legic UIN rev. endian</p> <p>Protocol 74 - Legic Advant UIN</p> <p>Protocol 107 - Legic Prime UIN</p> <p>Protocol 80 - FIPS201 ID from PIV-II</p> <p>Protocol 108 - Legic short KGH seg. 1</p> <p>Protocol 109 - Legic short KGH seg. 2</p> <p>Protocol 110 - Legic short KGH seg. 3</p> <p>Protocol 111 - Legic short KGH seg. 4</p> <p>Protocol 75 - Interflex card ID</p> <p>Protocol 64 - Legic KGH seg. 1</p> <p>Protocol 65 - Legic KGH seg. 2</p> <p>Protocol 66 - Legic KGH seg. 3</p> <p>Protocol 67 - Legic KGH seg. 4</p> <p>Protocol 29 - Legic KGH seg. 1 compat.</p> <p>Protocol 30 - Legic KGH seg. 2 compat.</p> <p>Protocol 31 - Legic KGH seg. 3 compat.</p> <p>Protocol 32 - Legic KGH seg. 4 compat.</p> <p>Protocol 129 - Custom 06/266</p> <p>Protocol 132 - Custom 07/003</p> <p>Protocol 134 - Custom 07/005</p> <p>Protocol 140 - Custom 08/004</p> <p>Protocol 141 - Custom 08/005</p> <p>Protocol 151 - Custom 11/004</p> <p>Protocol 153 - Custom 11/006</p> <p>Protocol 154 - Custom 11/007</p> <p>Protocol 156 - Custom 11/009</p> <p>Protocol 159 - Custom 11/012</p> <p>Protocol 163 - Custom 12/002</p> <p>Protocol 165 - Custom 12/004</p> <p>Protocol 173 - Custom 13/004</p> <p>Protocol 175 - Custom 13/006</p> <p>Protocol 178 - Custom 13/009</p>

Reader	Available protocols
B-090 - iButton (Dallas)	<b>Protocol 11 - iButton UIN</b>
B-091 - SmartCard v2	<b>Protocol 78 - FIPS201 ID from PIV-II</b> Protocol 1078 - FIPS201 ID from PIV-II cont. Protocol 1701 - Java Card IC Serial No. <i>Protocol 95 - ATR testing</i>
B-092 - SmartCard v2 TermPro	<b>Protocol 34 - Smartcard UIN</b> Protocol 53 - Smartcard PKCS #15 sn. Protocol 54 - SC PKCS #15 sn. with PIN1 verify Protocol 55 - SC PKCS #15 sn. with PIN2 verify Protocol 78 - PIV card Protocol 79 - Gemalto .NET and Gemalto PKI Applet Protocol 123 - CAC card Protocol 131 - Custom 07/002 Protocol 144 - Custom 10/002 Protocol 167 - Custom 12/006 Protocol 195 - Custom 18/001 <i>Protocol 112 - Remote Smartcard testing mode</i>
B-093 - Reader 3 Smart Card	<b>Protocol 78 - FIPS201 ID from PIV-II</b> Protocol 1078 - FIPS201 ID from PIV-II cont. Protocol 1701 - Java Card IC Serial No. <i>Protocol 95 - ATR testing</i>
B-095 - Reader 3 iButton	<b>Protocol 11 - iButton UIN</b>
B-098 - Fingerprint v2	<b>Protocol 24 - Fingerprint sec. normal</b> Protocol 98 - Fingerprint sec. high Protocol 99 - Fingerprint sec. highest
B-099 - Fingerprint swipe	<b>Protocol 24 - Fingerprint sec. normal</b> Protocol 98 - Fingerprint sec. high Protocol 99 - Fingerprint sec. highest