

868 MHz Long-Range Reader / Writer SIL-9500-MUX8



- 868 MHz RFID Reader/Writer for Long-Range applications
- reading distance up to 12m with external antenna / 8 dBi gain [depending on tag size]
- integrated multiplexer for 8 antennas
- RSSI Data Response
- 2 digital Inputs / up to 4 digital Outputs
- Monitor output
- USB Connector for Keyboard and Mouse

- Web Interface for configuration and firmware update
- Linux based operating system
- 1GB User Memory allows user creating own application software running on the reader

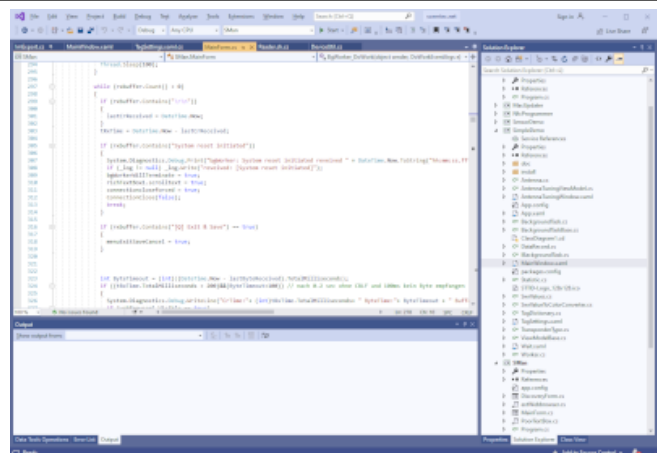


Typical use cases:

- Logistic UHF Reader Gates
- Item Tracking
- Automation technology
- Vehicle identification
- Animal identification

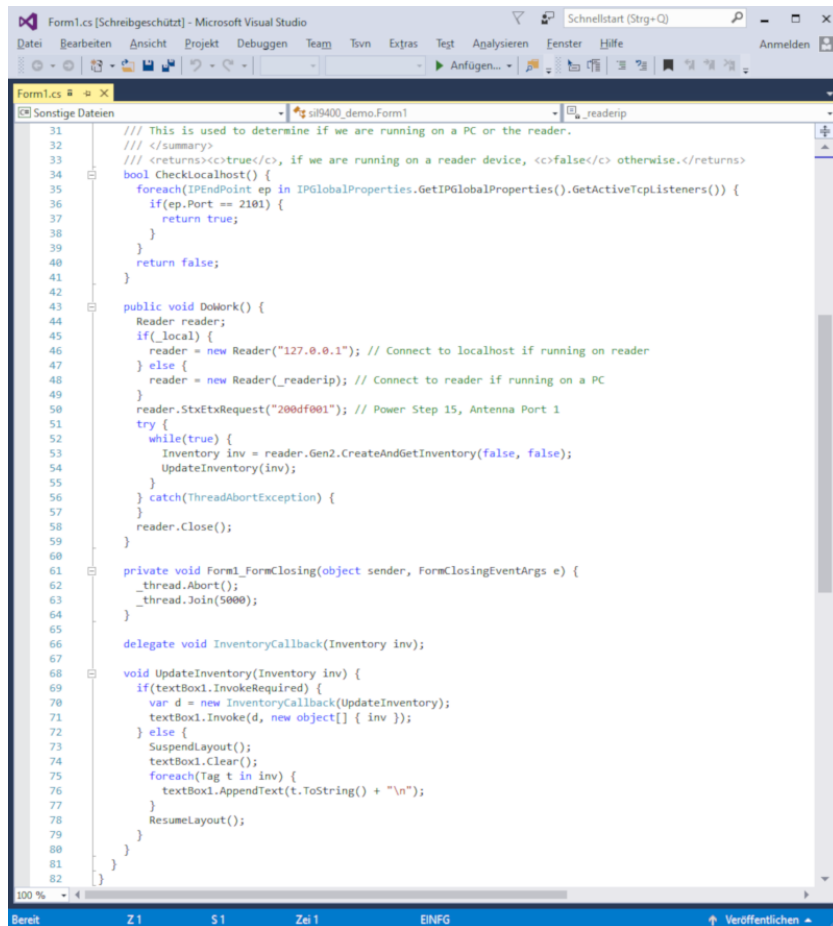
User Application Software Development

The user can create own applications for the SIL-9500 to integrate the device into existing infrastructures like ERP-systems or cloud applications. Depending on requirements, a monitor, keyboard and a mouse can be attached to control the application. After development, the user application is transmitted to the device by uploading the files with a web browser.



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Software Tools



```
31 // This is used to determine if we are running on a PC or the reader.
32 // </summary>
33 // <returns><true/>, if we are running on a reader device, <false/> otherwise.</returns>
34 bool CheckLocalhost() {
35     foreach(IPEndPoint ep in IPGlobalProperties.GetIPGlobalProperties().GetActiveTcpListeners()) {
36         if(ep.Port == 2101) {
37             return true;
38         }
39     }
40     return false;
41 }
42
43 public void DoWork() {
44     Reader reader;
45     if(!_local) {
46         reader = new Reader("127.0.0.1"); // Connect to localhost if running on reader
47     } else {
48         reader = new Reader(_readerip); // Connect to reader if running on a PC
49     }
50     reader.StxEtxRequest("200df001"); // Power Step 15, Antenna Port 1
51     try {
52         while(true) {
53             Inventory inv = reader.Gen2.CreateAndGetInventory(false, false);
54             UpdateInventory(inv);
55         }
56     } catch(ThreadAbortException) {
57     }
58     reader.Close();
59 }
60
61 private void Form1_FormClosing(object sender, FormClosingEventArgs e) {
62     _thread.Abort();
63     _thread.Join(5000);
64 }
65
66 delegate void InventoryCallback(Inventory inv);
67
68 void UpdateInventory(Inventory inv) {
69     if(textBox1.InvokeRequired) {
70         var d = new InventoryCallback(UpdateInventory);
71         textBox1.Invoke(d, new object[] { inv });
72     } else {
73         SuspendLayout();
74         textBox1.Clear();
75         foreach(Tag t in inv) {
76             textBox1.AppendText(t.ToString() + "\n");
77         }
78         ResumeLayout();
79     }
80 }
81
82 }
```

The development can be done using Microsoft Visual Studio® or MonoDevelop® using the .NET or Mono-Framework. For access to the RFID protocol, a library is available.

868 MHz Long-Range Reader / Writer

SIL-9500-MUX8

Technical Data:			
	SIL-9500-MUX8	SIL-9500-MUX8-H	SIL-9500-MUX8-IO
Comment		top-hat rail (DIN rail) mounting	additional outputs and RS232
Dimensions: (L x W x H) mm	190 x 115 x 42	165 x 120 x 42	190 x 125 x 42
Dimensions without connectors:	190 x 104 x 42	165 x 109 x 42	190 x 104 x 42
Power supply:	12-24 V DC		
Current consumption:	full operation 800 mA @ 24 V DC		
Transmit frequency:	865.7 MHz to 867.5 MHz (see EN 302 208)		
Antenna:	8 external antenna ports via SMA-connector		
Output Power (conducted @50Ω):	1.0 W		
Transponder:	ISO 18000-6C EPC Gen2		
Ethernet Interface	1		
USB Interface:	Host: 2 x USB-A or Device: 1 x USB-C		
RS232 Interface:	1	1	2 1 on the rear panel
Potential-free outputs:	2	2	4 2 of them on the rear panel
Potential-free inputs:	2		
Housing:	Alu / IP20		
Operating temperature:	-10° to +50 °C		

Order Information:			
	SIL-9500-MUX8	SIL-9500-MUX8-H	SIL-9500-MUX8-IO
Order-No.:	220.9500	220.9501	220.9502

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Accessories:

SAT-A26/26-LR-P-UHF-cir	Order-No.: 400.2626
SAT-A12/12-P-868MHz-cir	Order-No.: 400.2018
SAT-A13/13-P-868MHz	Order-No.: 400.1313
Cable-UHF-3m-SMA-N	Order-No.: 999.0346
Cable-UHF-6m-SMA-N	Order-No.: 999.0132
Cable-UHF-12m-SMA-N	Order-No.: 999.0153
MOUNT-A12/12-P-UHF	Order-No.: 999.0129
24 V Power Supply 2.7A EU	Order-No.: 999.0165
24 V Power Supply 1A EU	Order-No.: 999.0067