



# Printing with the eWON

TN 07

ver 1.1

13/10/2004

For all eWON® types

## 1 Overview

---

In some case it may be usefull to print messages using the eWON. Example:

- **Report printing**
- **Real time Alarm printing**

As the eWON has only 1 serial port with a 485 interface it is not obvious to connect it to a printer.

This technical note describes how to connect a printer using a **small and low cost print server to send data to the printer.**

## 2 Principle

---

The eWON will be connected to the printer using a print server that has RAW TCP PRINTING capability.

A socket (port 9100) is then opened in BASIC to the print server, and data written to that socket are output to the printer as if the printer was directly connected to the eWON.

The 9100 port is defined by the RAW TCP printing standard. Some print servers have more than one interface and allow acces to ports 9100, 9101,...

## 3 Example of print server

---

<b>Manufacturer</b>	D-LINK
<b>Type</b>	DP-300
<b>Description</b>	Print server Fast-Ethernet 10/100
<b>Approx. Price</b>	250€

This print server has 3 ports:

- **2 parallel**
- **1 serial**

So you could connect up to 3 printers and it supports both serial or parallel interface.

The printer has a 10/100 Base TX interface to connect it to a TCP/IP ethernet network (or directly to the eWON using a crossed cable).

If the print server is configured at TCP/IP address 10.0.0.3, then the physical ports will be accessible at the following TCP/IP sockets:

<b>Server Port</b>	<b>TCP/IP Address</b>	<b>TCP Port</b>
LPT1	10.0.0.3	9100
LPT2	10.0.0.3	9101
COM1	10.0.0.3	9102



# Printing with the eWON

**TN 07**

ver 1.1

13/10/2004

For all eWON® types

---

## 4 Printing from the eWON

---

The eWON has to open a socket to the print server using the OPEN command.

```
open "tcp:10.0.0.3:9100" for binary output as 1
```

Then it polls until the socket is open

**WaitOpen:**

```
  a$ = get 1
```

```
  if (a$="#CLOSED#") then goto WaitOpen
```

Then it can print using the PUT command.

```
  for i%=1 to 20
```

```
    a$ = "Test"+str$(i%)+chr$(13)+chr$(10)
```

```
  put 1,a$
```

```
  next i%
```

You may need to use some escape characters to format your text like CR LF and FF to force page ejection on a laser printer.

```
  rEM Send a form feed (0x0C)
```

```
  a$ = chr$(12)
```

```
  put 1,a$
```

Then close the socket

```
  close 1
```