

PLEASE NOTE: Digi has stopped production of this model.

For support please contact service@ravas.com

1 Start

To make the configuration easier, supplies RAVAS for each weighing system with a WLAN device a TP-LINK router. The intention is to discard the router when the Digi module is configured successfully.

The TP-LINK router is configured by RAVAS to make automatically contact with the Digi Connect. Screenshots, settings and passwords of the TP-LINK are used in this manual.

Make sure the RAVAS scale is switched on, and close to the router.

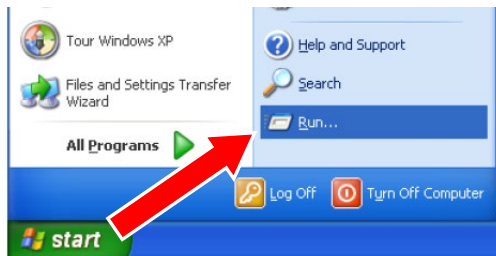
Connect the router to a stand-alone pc. It is best to use a network cable.

Attention: **Use one of the yellow 'Ethernet' ports. Do not use the blue port 'WAN'.**

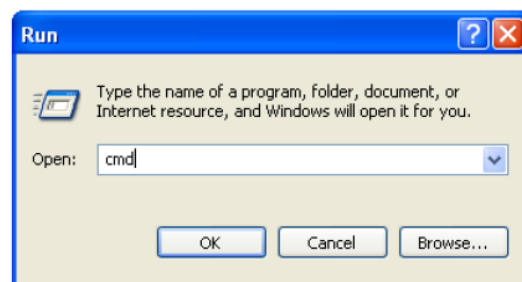
As a first step test the connection: for this you need to know the IP-address of the router. The IP-address of the TP-LINK is **192.168.0.1**

If you do not know the IP-address of the router you are using, you can find it this way:

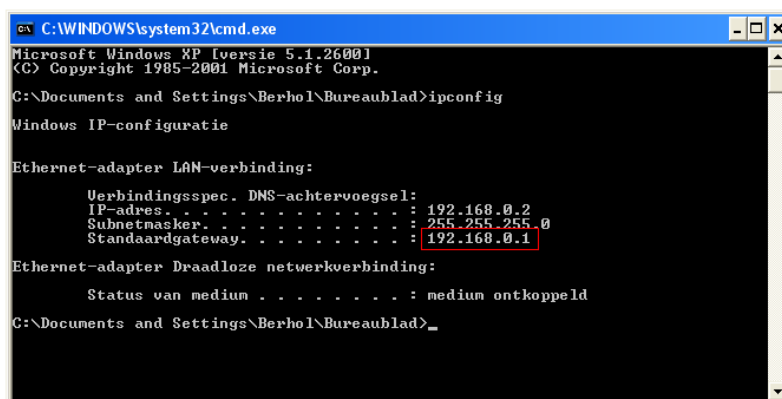
Go to 'Start > Run' on your PC:



Type **cmd** then click on 'OK':



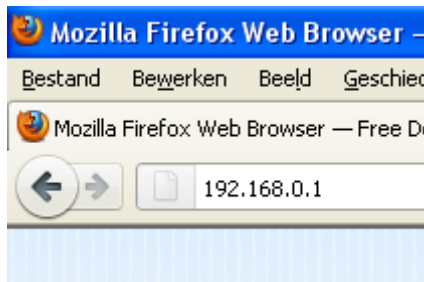
Type **ipconfig** then push enter:



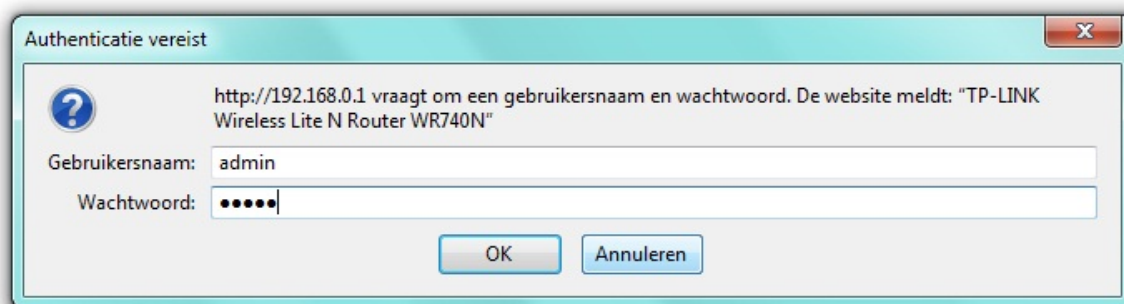
The address you require is the Standardgateway. This is the IP-address of your router.

2 Find the Digi Connect module

It is recommended to use Mozilla Firefox for the configuration of the Digi module.
Open your browser, and enter the IP-address of the router at the address bar:



You now enter the 'website' of the TP-LINK router:



User Name : admin

Password : admin

Click on 'OK'

You are logged in on the TP-LINK:

The screenshot shows the TP-LINK 150M Wireless Lite N Router web interface. The left sidebar contains a menu with options: Status, Quick Setup, QSS, Network, Wireless, DHCP, Forwarding, Security, Parental Control, Access Control, Advanced Routing, Bandwidth Control, IP & MAC Binding, Dynamic DNS, and System Tools. The main content area is titled 'Status' and displays the following information:

Status

Firmware Version: 3.12.11 Build 120320 Rel.51047n
Hardware Version: WR740N v4 00000000

LAN

MAC Address: A0-F3-C1-3A-99-46
IP Address: 192.168.0.1
Subnet Mask: 255.255.255.0

Wireless

Wireless Radio: Enable
Name (SSID): RAVAS
Channel: Auto (Current channel 6)
Mode: 11bgn mixed
Channel Width: Automatic
MAC Address: A0-F3-C1-3A-99-46
WDS Status: Disable

Status Help

The Status page displays the Router's current status and configuration. All information is read-only.

LAN - The following parameters apply to the LAN port of the Router. You can configure them in the **Network > LAN** page.

- **MAC Address** - The physical address of the Router, as seen from the LAN.
- **IP Address** - The LAN IP address of the Router.
- **Subnet Mask** - The subnet mask associated with LAN IP address.

Wireless - These are the current settings or information for Wireless. You can configure them in the **Wireless > Wireless Settings** page.

- **Wireless Radio** - Indicates whether the wireless radio feature of the Router is enabled or disabled.
- **Name(SSID)** - The SSID of the Router.
- **Channel** - The current wireless channel in use.
- **Mode** - The current wireless mode which the Router works on.
- **Channel Width** - The bandwidth of the wireless channel.
- **MAC Address** - The physical address of the Router, as seen from the WLAN.
- **WDS Status** - The status of WDS' connection. Init: WDS connection is down; Scan: Try to find the AP; Auth: Try to authenticate; ASSOC: Try to associate; Run: Associated successfully.

WAN - The following parameters apply to the WAN ports of the Router. You can configure them in the **Network > WAN** page.

- **MAC Address** - The physical address of the WAN port, as seen from the Internet.
- **IP Address** - The current WAN (Internet) IP Address. This field

Go to 'DHCP > DHCP Client List':

The screenshot shows the TP-LINK 150M Wireless Lite N Router web interface. The left sidebar contains a menu with options: Status, Quick Setup, QSS, Network, Wireless, DHCP, Forwarding, Security, Parental Control, Access Control, Advanced Routing, Bandwidth Control, IP & MAC Binding, Dynamic DNS, and System Tools. The main content area is titled 'DHCP Clients List' and displays a table of DHCP clients connected to the router.

DHCP Clients List

ID	Client Name	MAC Address	Assigned IP	Lease Time
1	NB-SYST2010	1C-C1-DE-FD-DB-01	192.168.0.2	01:52:39
2	CAA94BD	00-20-4A-AA-94-BD	192.168.0.3	01:53:07

DHCP Clients List Help

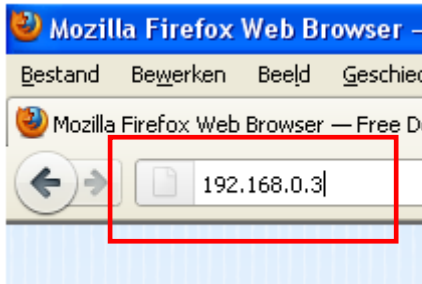
This page shows Client Name, MAC Address, Assigned IP and Lease Time of each DHCP Client connected to the Router.

- **Client Name** - The name of the DHCP client.
- **MAC Address** - The MAC address of the DHCP client.
- **Assigned IP** - The IP address that the Router has allocated to the DHCP client.
- **Lease Time** - The time of the DHCP client leased.

You cannot change any of the values on this page. To update this page and to show the current connected devices, click on the **Refresh** button.

A list will show the available wireless systems. An IP-address has been allotted to the Digi Connect module (see picture above). You will recognize the Digi Connect by the MAC Address, which is visible on the housing of the RAVAS unit. (Also shown on a white label on the back of the Digi Connect device itself)

Enter the IP-address of the Digi Connect in the browser address bar:



This will bring you to the 'website' of the Digi Connect: you are connected!



Digi Connect Wi-SP 16M Python Configuration and Management

A screenshot of the login page for the Digi Connect Wi-SP 16M Python Configuration and Management interface. The page has a blue header with the word 'Login' and a 'Help' link. The main content area is white and contains a welcome message, instructions to specify username and password, and a link to the User Guide. On the right side, there are input fields for 'Username:' and 'Password:', and a 'Login' button. The footer contains copyright information for Digi International Inc. from 1996 to 2011.

Username : root

Password : dbps

You can log in.

You now are able to configure the Digi Connect to the settings required for your company. RAVAS advises these actions to be made by your network administrator.


Notes:

- * To save the configuration you need to save the settings of each page separately. The Digi Connect module must reboot to apply the settings.
- * When there is a bad WLAN connection please make sure that multiple routers are not interfering with each other because they are using the same channel number. It is preferable to use channel numbers 1 – 6 – 11 they don't overlap with other channels.
- * Once the Digi Connect module is configured to your settings, you can discard the TP-Link router. The router was only provided for the configuration of the Digi Connect module.

3 Configuring the Digi Connect module

RAVAS has already configured the Digi Connect as described below.

Choose 'Serial Ports':




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Home
Getting Started
Tutorial Not sure what to do next? This Tutorial can help.
System Summary
Model: Digi Connect Wi-SP 16M Python
WiFi MAC Address: 00:40:9D:73:BA:CE
WiFi IP Address: 192.168.0.4
Link Local Address: FE80::240:9DFF:FE73:BACE
Description: None
Contact: None
Location: None
Device ID: 00000000-00000000-00409DFF-FF73BACE

Click on 'Port 1':



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Serial Port Configuration

Port	Description	Profile	Serial Configuration
Port 1	None	TCP Sockets	9600 8N1

Check the 'TCP Sockets' box:

The screenshot shows the 'Select Port Profile...' page. On the left is a navigation menu with categories: Configuration (Network, Serial Ports, Alarms, System, iDigi, Users), Applications (Ekahau Client, Python, RealPort, Industrial Automation), Management (Serial Ports, Connections, Event Logging), and Administration (File Management, Backup/Restore, Update Firmware, Factory Default Settings, System Information, Reboot, Logout). The 'Reboot' link is highlighted with a red box. The main content area is titled 'Select Port Profile...' and contains a list of profiles: RealPort, Console Management, TCP Sockets (highlighted with a red box), UDP Sockets, Serial Bridge, Local Configuration, and Industrial Automation. Each profile has a brief description and a 'More...' link.

Press 'Apply' at the bottom of the page.


The following page pops up:

The screenshot shows the 'Serial Port Configuration' page. The 'Port Profile Settings' section is expanded, showing 'Current Port Profile: TCP Sockets' and a 'Change Profile...' link. Below this is the 'TCP Server Settings' section, which includes a description and a table of TCP ports. The 'Enable Raw TCP access using TCP Port: 2101' checkbox is highlighted with a red box. The 'TCP Client Settings' section is also visible, showing options for automatically establishing TCP connections.

Check 'Enable Raw TCP access using TCP Port 2101'.

Press 'Apply' at the bottom of the page, then 'Reboot' on the left.

Click on 'Reboot' in this window.




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Reboot
The reboot process will take approximately 1 minute to complete. Click Reboot now to reboot the Digi Connect Wi-SP 16M Python.

The Digi Connect will reboot. This will take approximately 1 minute.

If the Digi does not reconnect automatically, press 'click here':



Digi Connect Wi-SP 16M Python Configuration and Management

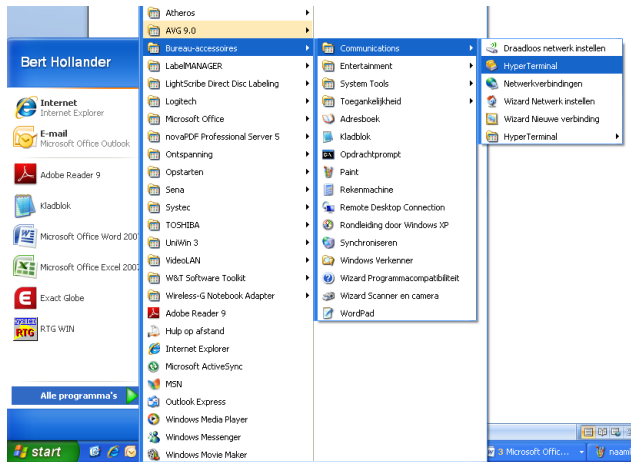
[Help](#)

Reboot In Progress
The Digi Connect Wi-SP 16M Python with MAC address 00:40:9D:73:BA:CE is currently rebooting. You will be reconnected automatically in approximately 1 minute.
With DHCP currently enabled, a new IP address could be assigned automatically by the DHCP server. If this happens and the reconnect fails, please use the setup wizard or discovery utility that was provided on your CD to find this device.
If you are not reconnected automatically [click here](#).

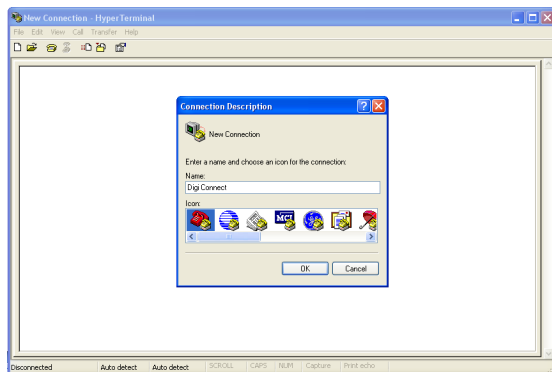
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4 To check the data transfer

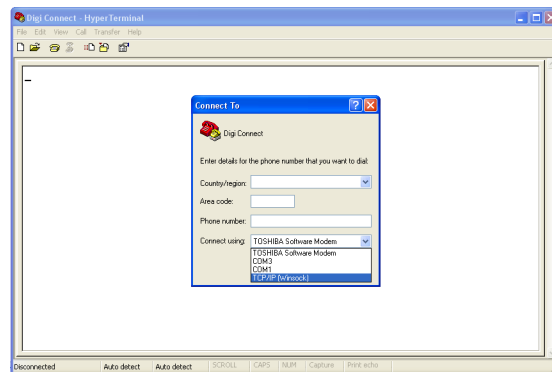
Start Hyper Terminal. This program is installed by default on Windows XP or lower.



Enter a name, press OK:

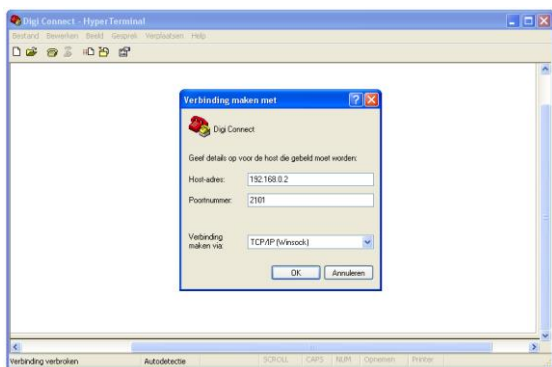


Select 'TCP/IP (Winsock)':

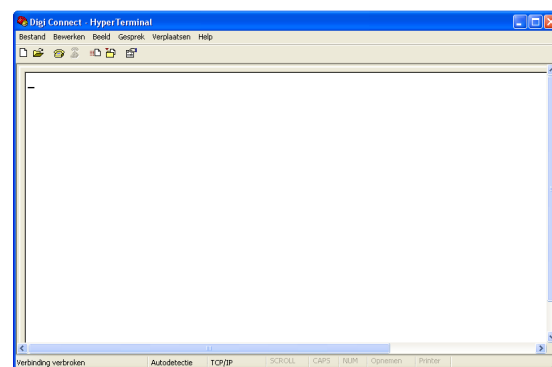


At 'Host address' enter the IP address of the

Digi Connect. 'Port number' is 2101:



Press OK and a blank screen will appear:



The RAVAS indicator should have the PC bi-directional command structure active.

The datatransfer protocol must be identical for both the PC and the RAVAS indicator:

Baudrate: 600 to 19200 (RAVAS default = 9600)

Databits: 7 or 8 (RAVAS default = 8)

Stopbits: 1 or 2 (RAVAS default = 1)

Parity: odd/even/none (RAVAS default = none)

Handshake: none

Depending on which indicator you are using, you can use most of the following commands on the PC to show the weight read out on the Hyper Terminal screen.

ASCII commands*2

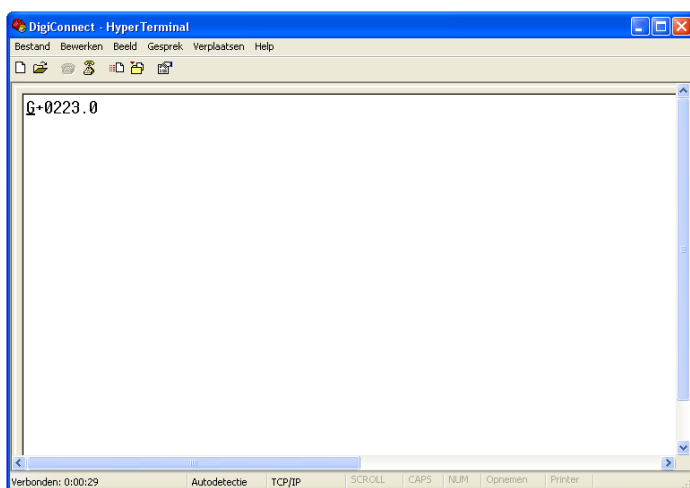
ASCII command	Response string	Operation
SZ<CR>	OK<CR>/ERR<CR>	Set zero value
RZ<CR>	OK<CR>/ERR<CR>	Reset zero value
S1<value><CR>	OK<CR>/ERR<CR>	Set setpoint 1 value
S2<value><CR>	OK<CR>/ERR<CR>	Set setpoint 2 value
SP<value><CR>*1	OK<CR>/ERR<CR>	Set preset tare value
ST<CR>	OK<CR>/ERR<CR>	Set tare
SG<CR>	G+0001.0<CR>	Send gross mode (continuously)
SN<CR>	N+0001.0<CR>	Send net mode (continuously)
SW<CR>	W+00010+000103805<CR>	Send weights mode (continuously)
RT<CR>	OK<CR>/ERR<CR>	Reset tare
RP<CR>	OK<CR>/ERR<CR>	Reset preset tare
G1<CR>	1+0001.0<CR>	Get setpoint 1 level
G2<CR>	2+0001.0<CR>	Get setpoint 2 level

GP<CR>	P+0001.0<CR>	Get preset tare
GT<CR>	T+0001.0<CR>	Get tare
GG<CR>	G+0001.0<CR>	Get gross
GN<CR>	N+0001.0<CR>	Get net
GW<CR>	W+00010+000103805<CR>	Get net, gross, status and checksum
MN<CR>	N+0001.0<CR>	Get net, wait for no motion
MG<CR>	G+0001.0<CR>	Get gross, wait for no motion
AN<CR>	N+0001.0;0001<CR>	Get net and alibi nr., wait for no motion
AG<CR>	G+0001.0;0001<CR>	Get gross and alibi nr., wait for no motion

*1: If the scale is working in ranges with a number after the decimal point, the preset tare value should be given accordingly. If the scale is working in ranges equal to or higher than 1 kg/lb, then the value should be entered with the decimal point at the end of the value.

E.g. ranges 0.1/0.2/0.5 >> SP0001.5<CR>, ranges 1/2/5/10/20/50 >> SP00150.<CR>

*2: If the scale is busy with a handling, like zeroing or taring, and a command is generated at the same time it will reply with the remark "BUSY" to the host.



The weight read out on Hyper Terminal, using the command GG<CR>