

6.12 Ethernet Adapter (L95-Z318, L45-Z318, L50-Z318, LMG-Z318)

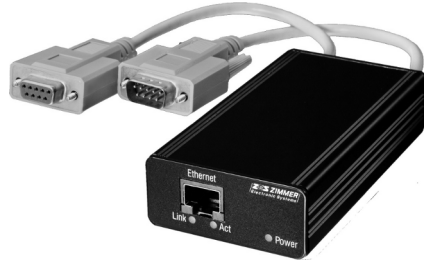


Figure 121: L95-Z318, L45-Z318, L50-Z318 - supply via LMG

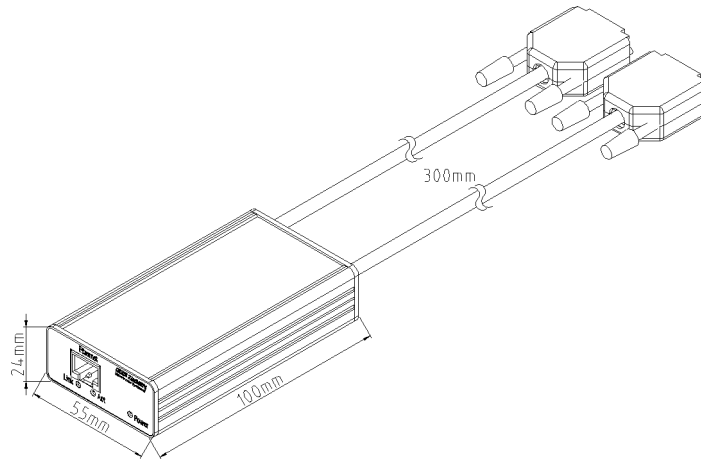


Figure 122: L95-Z318, L45-Z318, L50-Z318 - supply via LMG



Figure 123: LMG-Z318 - external supply via wall wart

This LAN adapter Z318 is useful for the communication with a power meter LMG located anywhere in a local area network LAN via a virtual COM port simulation. The communication is transmitted by the driver over LAN to the LMG for user purposes in the same way as e.g. the direct connection of PC/COM1 to LMG/COMa. The power meter LMG will be accessible via this virtual COM port. Perfect suitable for LMG Control software.

6.12.1 Safety warning!

Please refer to chapter 1.1: 'Safety precautions'!

6.12.2 System requirements, hardware specifications

- Windows XP home / Windows XP professional / Windows7 / 32bit or 64bit.
For other operating systems (including Windows: 98 / 2000 / NT / Vista, Linux: Debian / Mandriva / RedHat / Suse / Ubuntu) see <http://www.digi.com> -> support -> drivers and download the driver appropriate for your operating system for 'Digi Connect SP'.
- auto-sensing to 10/100 Mbit/s Ethernet
- throughput up to 230.400 baud
- data flow control with RTS/CTS, hardware reset with 'break'
- data throughput with LMG95/450/500
 - binary mode: about 3000 measuring values (trms, ac, dc, ..., harmonics, flicker, sample values, ...) per second!
 - ascii mode: about 1000 measuring values per second

6.12.3 Connection of the adapter L95-Z318 with LMG95

- Plug the connector of L95-Z318 labeled with „to LMG's COM B conn.“ to the LMG95 COM B jack.
- Plug the connector of L95-Z318 labeled with „supply“ to the LMG95 auxiliary transducer supply jack, if your application uses the supply jack e.g. for PSU600, then use LMG-Z318 with external supply via wall wart.
- Switch on the power meter and connect the LAN cable.
- assure that the LMG firmware is 3v136 or newer

6.12.4 Connection of the adapter L45-Z318 with LMG450

- Plug the connector of L45-Z318 labeled with „to LMG's COM B conn.“ to the LMG450 COM B jack.
- Plug the connector of L45-Z318 labeled with „supply“ to one of the LMG450 current clamp 1/2/3/4 jacks whichever is free, if your application uses four current sensors, then use LMG-Z318 with external supply via wall wart.
- Switch on the power meter and connect the LAN cable.
- assure that the LMG firmware is 2v121 or newer

6.12.5 Connection of the adapter L50-Z318 with LMG500

- Plug the connector of L50-Z318 labeled with „to LMG’s COM B conn.“ to the LMG500 COM B jack.
- Plug the connector of L50-Z318 labeled with „supply“ to one of the LMG500 sensor ID jacks whichever is free.
- Switch on the power meter and connect the LAN cable.
- assure that the LMG firmware is 4v077 or newer

6.12.6 Connection of the adapter LMG-Z318 with any LMGxx

- Connect the DSUB9 jack of LMG-Z318 with a 1:1 serial connection cable to LMGs COMa.
- Connect the wall wart with power input of LMG-Z318.
- Switch on the power meter and connect the LAN cable.

6.12.7 Configure the LAN connection with the Realport setup wizard

- You will find the setup wizard on the ZES support CD under driver\z318 or on the webpage <http://www.zes.com>. Start setup32.exe for 32-bit systems or setup64.exe for 64-bit systems.

Press ‘next’, the wizard tries to find the ethernet adapter. If it is not found, press reset for about 3 seconds at the backside of the ethernet adapterbox to remove possible given prior IP address and wait for about 1 minute before searching again.

This is the most important point in the installation. If the wizard still can not find the Z318 in your LAN, please ask your system administrator before you contact the support hotline of ZES. The support engineers of ZES will need a lot of detailed information about your local network to consult.

- If the wizard found one or more devices choose the appropriate one and press ‘next’.
- Take care, that Z318 gets the same IP address after its next startup. Configure your local DHCP server that the fix MAC address of Z318 gets everytime the same IP address or set a fix (and free!) IP address manually. This is important, because in the next step you assign a virtual COM port to this IP address and if the IP address was different after the next startup, the virtual COM port would be not available.

- Select: 'add a new device'. It might be necessary to remove previous installed drivers with 'remove an existing device'.

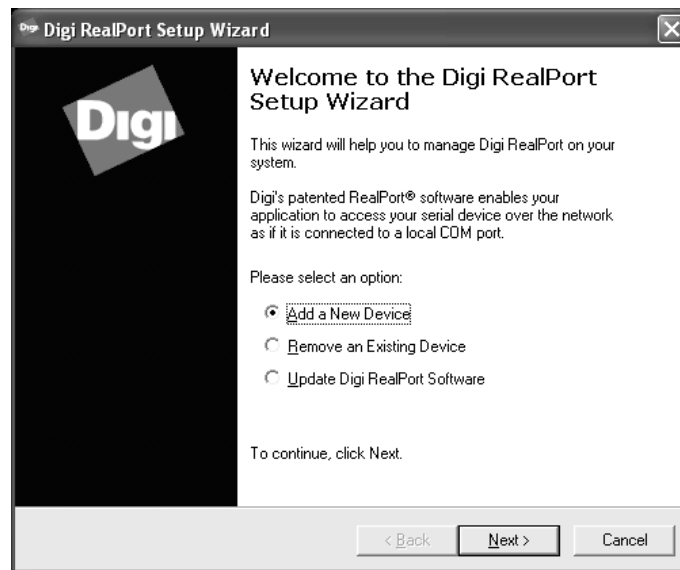


Figure 124

- Select the device ..

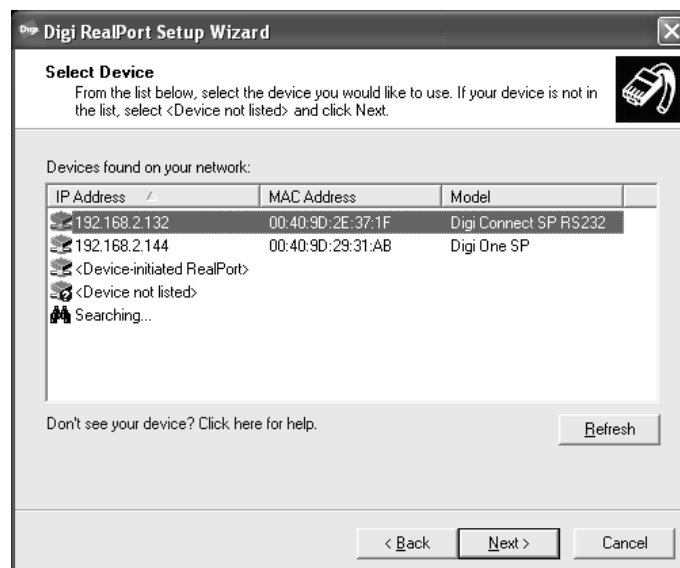


Figure 125

- .. and assign a virtual COM port:

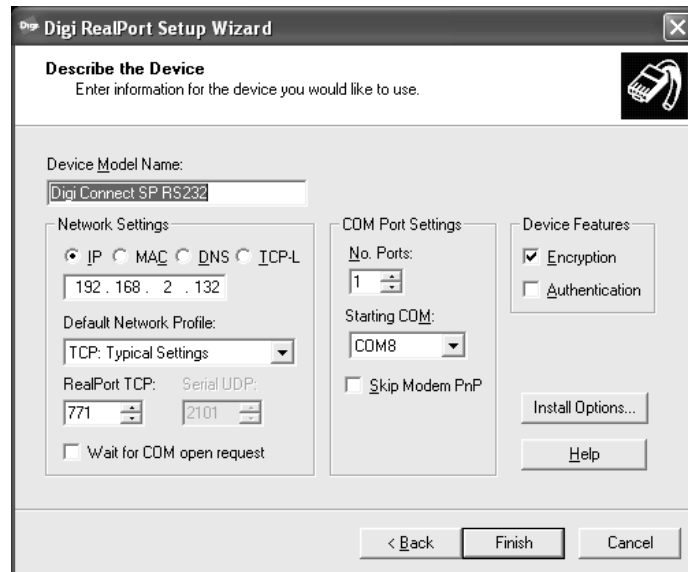


Figure 126

The power meter LMG is now accessible via this virtual COM port.

6.12.8 Configuration and Management by web interface

- Start your Browser and login to the IP adress obtained to your LAN adapter Z318 <http://192.168.x.xx/login.htm> with the username 'root' and the password 'dbps':

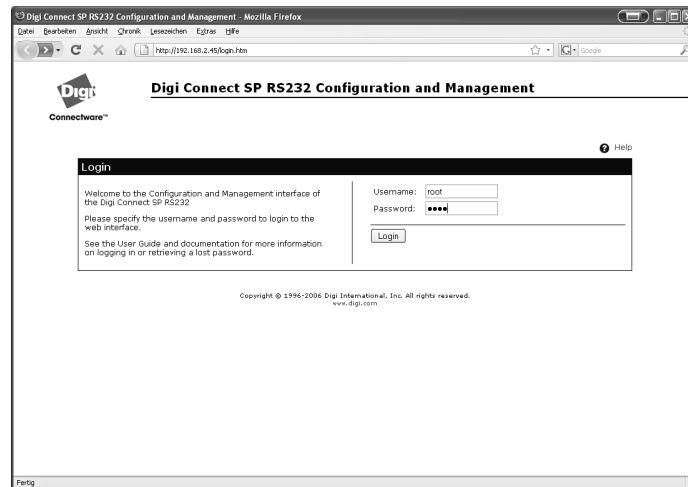


Figure 127

- Here you can manage the settings in a comfortable way: e.g. check MAC Address, IP Adress, firmware update and so on.

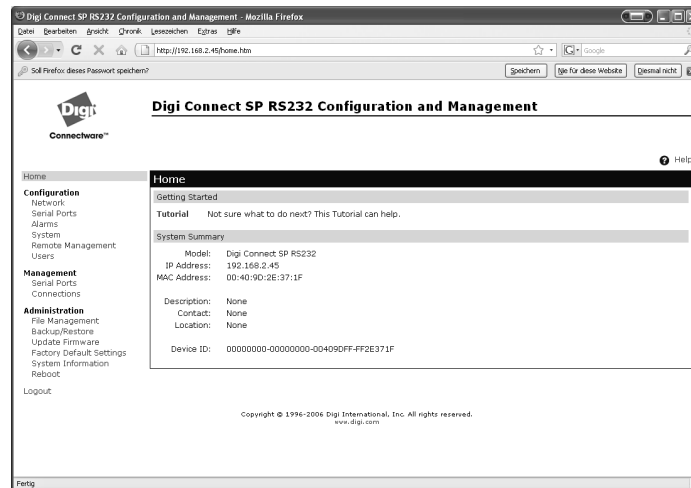


Figure 128

6.12.9 Troubleshooting

The following problems may appear while installing the ethernet adapter. If the problem remains after checking the following points, please contact ZES at sales@zes.com or ++49 6171 628750

- please check all connections: supply, RS232, LAN,
in case of LMG-Z318 and LMGx COMa: use 1:1 serial cable, no nullmodem
- connect the ethernet adapter to the power supply, press reset, wait for about 1 minute and try again
- switch off your antivirus protection software, the firewall may block the communication