

TDS20065 Universal HVAC

The TDS20065 is suited for controlling specific VRV/VRF units. Depending on the brand and the specific unit(s), the interface can be configured to integrate up to 64 indoor units (depending on the integrated HVAC type).

The TDS20065 is supplied with a TDS15200 Airco Software license.

See the list of the supported HVAC models in the datasheet. If your required models are not listed, please contact your TELETASK supplier.

Remark: An additional adapter TDS20066 is required for Fujitsu (General).

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1. TDS20065 Configuration

1.1. On the TDS20065 touch screen

- Remove power supply and the communication line of the HVAC system
- Set the dip switches on TDS20065 as described in the Quick installation guide (Login as professional) (brand specific) supplied with the TDS20065.
- Connect the power supply
- Configure the TDS20065 on its touch screen:

1. Go to settings



2. Set 'Virtual COM port' to ON

1.2. Additional steps for Daikin **Non-VRV** or Mitsubishi Electric **Non-VRF**

For Daikin or Mitsubishi Electric Non-VRV/VRF equipment, DC voltage supplied by the TDS20065 might be required for proper operation. Before enabling DC output from TDS20065 make sure there is no DC voltage on HVAC communication line. If no DC voltage is detected: Daikin 14-16V DC, Mitsubishi 28-30V DC, do following:

- Disconnect TDS20065 from power and HVAC line.
- Change the dip switches S1 and S2 as shown below.

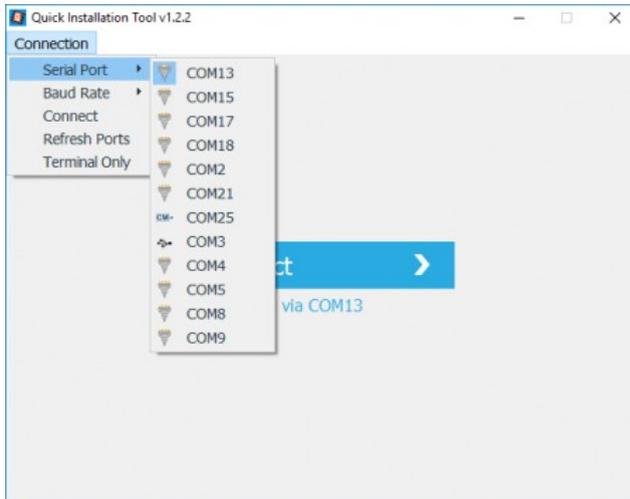
Daikin



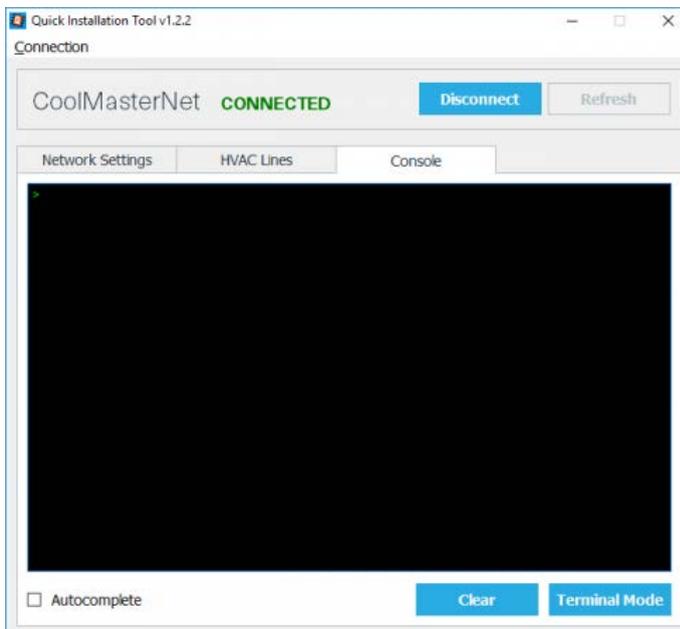
Mitsubishi Electric



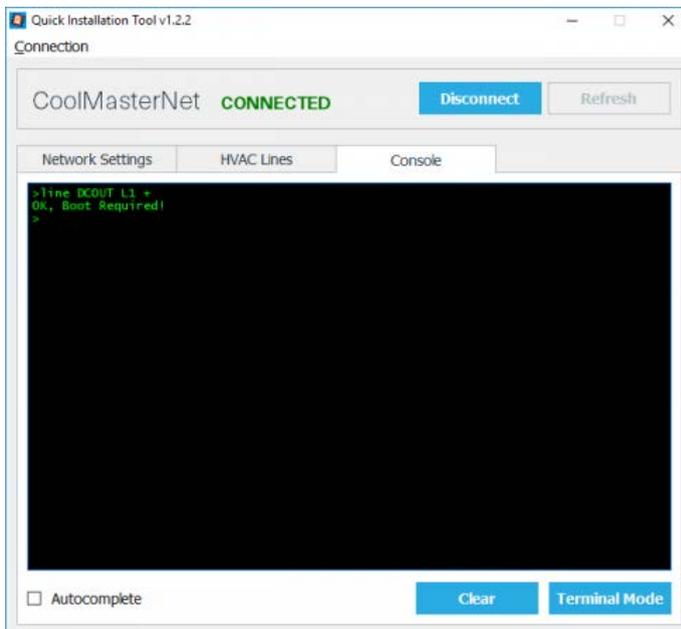
- Connect the TDS20065 with USB to your computer
- Start the application TDS20065-QuickInstall (professional.teletask.be > Login as professional > Pro Downloads > 1. TELETASK Software > Others > TDS20065-QuickInstall-180220_build_x.exe)
- In the menu Connection select the correct Serial Port, the one with the icon 'CM'. In this example this is COM25:



- Press Connect and select the tab 'Console':



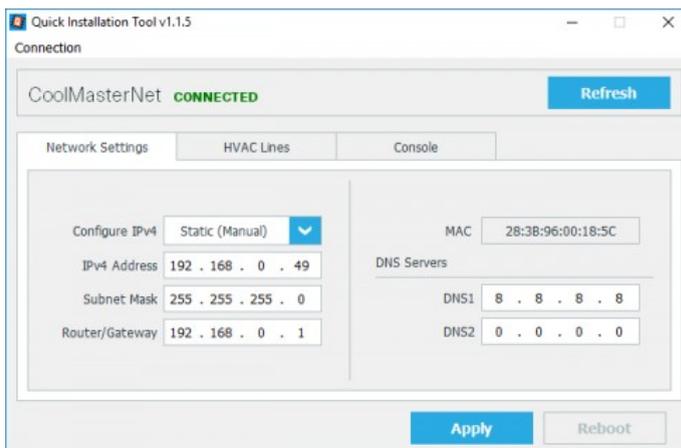
- Type there the command: line DCOUT L1 +



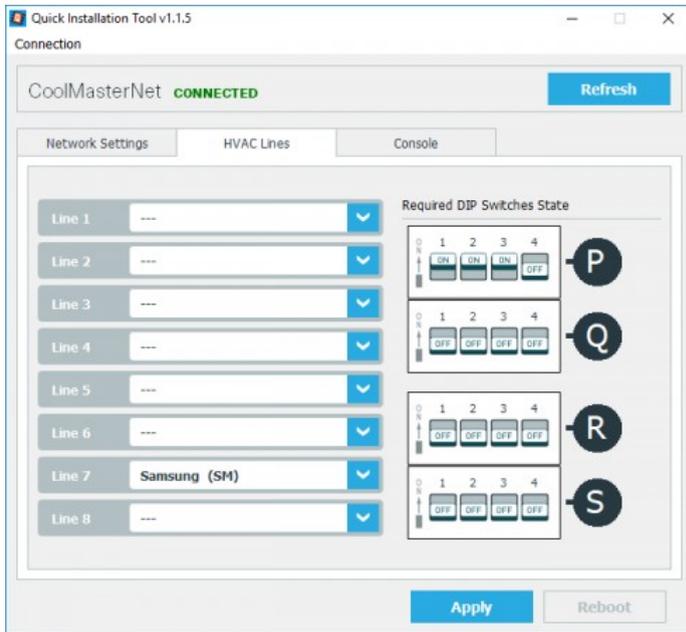
- Turn OFF the power from the TDS20065
- Turn ON the power for TDS20065 and connect it to HVAC line.

1.3. On the Quick Installation Tool

- Connect the TDS20065 via the supplied USB cable to your PC
- Remove the power supply (the TDS20065 is now powered via the USB cable)
- Start the application TDS20065-QuickInstall (professional.teletask.be > Login as professional > Pro Downloads > 1. TELETASK Software > Others > TDS20065-QuickInstall-180220_build_x.exe)



- Set 'Configure IPv4' to Static (Manual)
- Add the IP address of the TDS20065 to the 'IPv4 Adress'
- Set 'Subnet Mask' to 255.255.255.0
- Add the IP address of the Router/Gateway
- Click 'Apply'
- Go to tab 'HVAC Lines'



- Select the HVAC brand on the correct line (L1, L7 or L8). Make sure that only one is selected. See table below for the brand specific line:

Brand	HVAC Line #	Interface	Terminals	Polarity	Max. Indoor units	Max. Outdoor units
Daikin	L1	DIII-NET	F1 F2	none	64	10
Sanyo	L1	S-NET	U1 U2	none	64	16
Panasonic	L1		U1 U2	none	64	16
Toshiba	L1	TCC LINK	U1 U2	none	64	16
Mitsubishi Electric	L1	M-NET	M1 M2	none	50	10
Hitachi (JCI)	L1	H Link, H Link 2	1 2	none	64	10
York	L1		P Q	none	64	
Haier	L1		P Q	none	64	
LG	L7		Inter A Inter B	+ -	64	-
Gree VRF	L7		A B	+ -	16	4
Mitsubishi Heavy Industries	L7	SuperLink / New SuperLink	A B	+ -	64	10
Samsung	L7		F1 F2 / R1 R2	+ -	64	10
Midea	L7		X Y E	+ - GND	64	16
Kentatsu	L7		X Y E	+ - GND	64	16
Trane	L7		X Y E	+ - GND	64	16
Chigo	L7		X Y E	+ - GND	64	16
Fujitsu	L8 (USB)*	LON (ANSI/CEA-709.1-B)	X1 X2	none	64	10
Gree GMV5	L8 (USB)**		G1 G2		64	
Rheem	L8 (USB)*	LON (ANSI/CEA-709.1-B)	X1 X2		64	

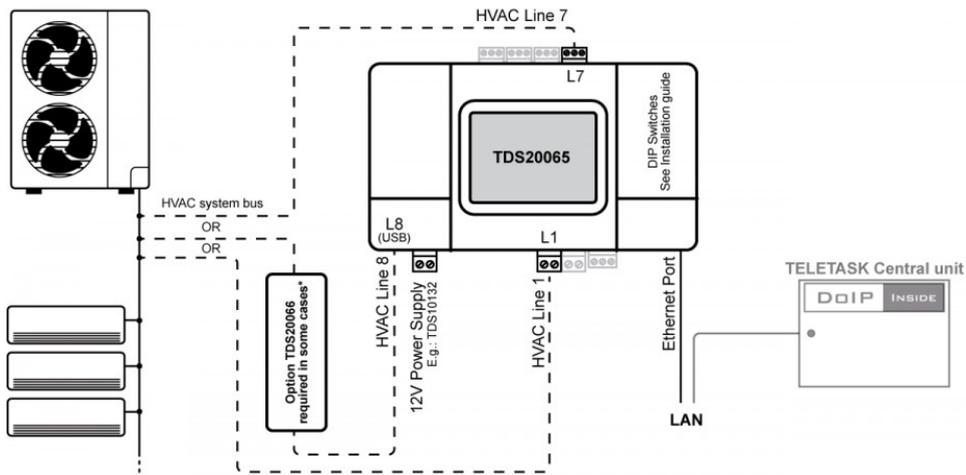
*TDS20066 required

** Additional parts required. Contact support for more information.

- Check and set the dip switches (also to be found in the supplied quick installation guide)
- Click 'Apply'
- Remove USB cable.

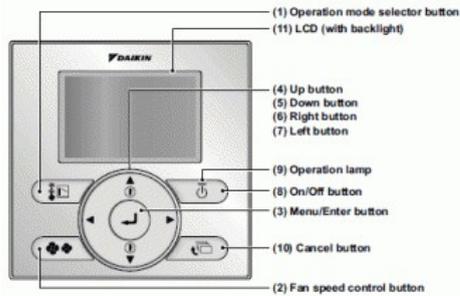
1.4. Install the TDS20065

- Connect the power supply
- Connect the HVAC communication line

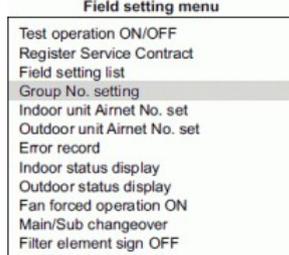


1.5. Map the HVAC indoor unit addresses with the TDS20065

- The HVAC indoor units must have been assigned with an address. Normally this has to be done by the HVAC installer. The steps below are for Daikin as an example.
- Press and hold Cancel button for a few seconds



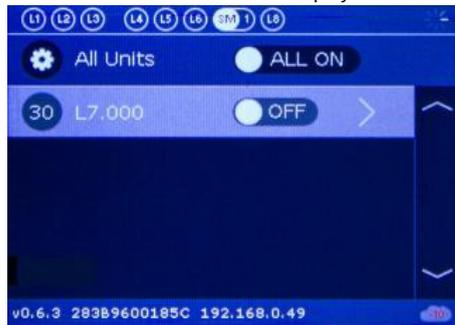
- Scroll down to Group No. setting function and press Menu/Enter button



- Program Group Address and then press Menu/Enter to save address
- The message 'Set' will appear.

Remember if Indoor unit can not see a CoolMasterNet you won't have the Group Address menu option. So make sure the CoolMasterNet is wired to F1 F2 HVAC line and powered.

- Go to the main menu of the TDS20065.
- All HVAC indoor units should be displayed with their addresses.



- If this is not the case, follow all steps from the beginning.

After all is set and the communication of the TDS20065 with the HVAC system is OK, you can start with the configuration in PROSOFT.

2. PROSOFT Configuration

2.1. License activation

A TDS15200 Airco software license is supplied with the TDS20065.

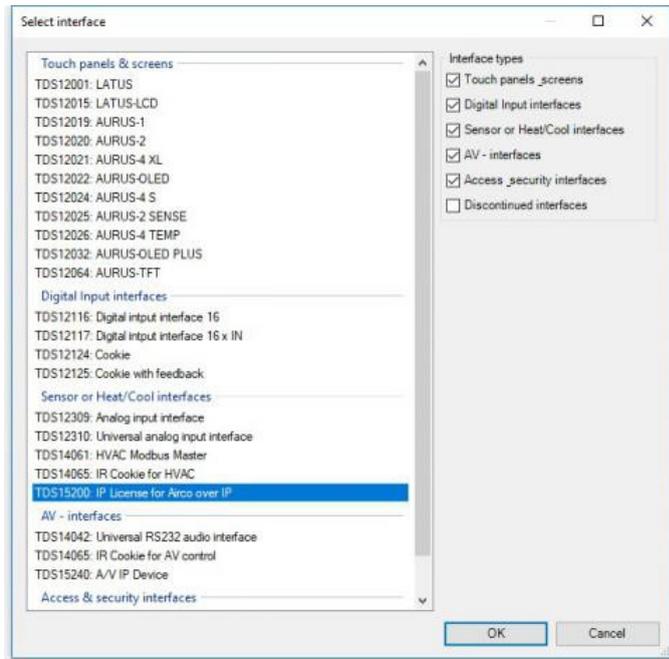
Follow these steps to activate the license:

- Go to www.teletask.be
- Choose *Professional* from the top menu
- In the *License activation* section, click on *License activation (TELETASK Cloud)*
- Sign in to your TELETASK Cloud account if you have one already. If not, click on *Create an account* and follow the registration procedure.
- After logging in, you should be forwarded to the *Activate License* page. If not, click here
- Complete the form and click *Download activation file*
- Wait a few seconds for your activation file to be downloaded (it will also be emailed to you)
- Start PROSOFT and open the correct .NBT project file.
- Import the activation file: choose *Extra > Licenses*
- Save the .NBT file and transmit it to the central unit

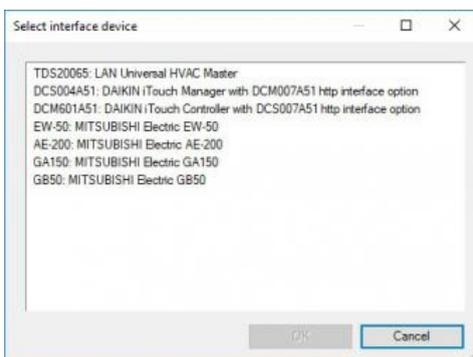
2.2. TDS20065 configuration

To add the TDS20065 to your project file, follow these steps:

- Go to the list of 'I'-interface press the button New and select a TDS15200:



- Select the TDS20065:



- In the 'Define Interface Function', fill in the IP address you configured on the TDS20065.
- By pressing the Add button several times you can add the correct number of indoor units as connected to the installation. If you have indoor units that work together as one zone you only have to add one.

Important:

Make sure that the amount of zones is the same as on the TDS20065 display and that the 'Universal HVAC zone Nr' are correct.

You can change it by just typing over it.

All zones are automatically named 'Sensor X', you just can rename it like you wish.

In the first Tab you also can also change the resolution from 1,0° to 0,5° only do this if the HVAC system is able to, most systems can only be controlled with steps of 1 degree. We recommend to leave it on 1 degree.

In the Tab 'Mode & Speed' you can setup some other settings that must match your HVAC system:

- Modes: check off the modes the HVAC does not support.
- Fan speeds setting: configure the step count as like available on the indoorunit, if then indoorunit support 'auto speed' you can also check that option.

Presets are to be configured like a standard TELETASK sensor.

Your screen looks like this:

Define Interface Function

Basic

Name: Interface device:

Central Unit:

IP Address: Port Nr:

Universal HVAC zones

- L1.100 Living
- L1.101 Kitchen
- L1.102 Bedroom
- L1.103 Bathroom

Sensor definition

Sensor Type:

Name:

Universal HVAC indoor unit properties Mode & Speed

Universal HVAC zone Nr:

HVAC resolution:

Presets

Max temperature:

Day Temperature: At cooling: 20°C

Standby Preset: = At cooling: 23°C

Night Temperature:

Add Delete

OK Cancel

Transmit the .nbt file to the Central Unit and you are good to go.