



DCTR (Data Controller TRansceivers) are based on IQRF technology. Intelligent transceivers with operating system including built-in mesh support and DPA (Direct Peripheral Access) framework enable full Plug & Play networking. DCTR topology allows one Coordinator mastering the network and up to 239 end devices (Nodes).

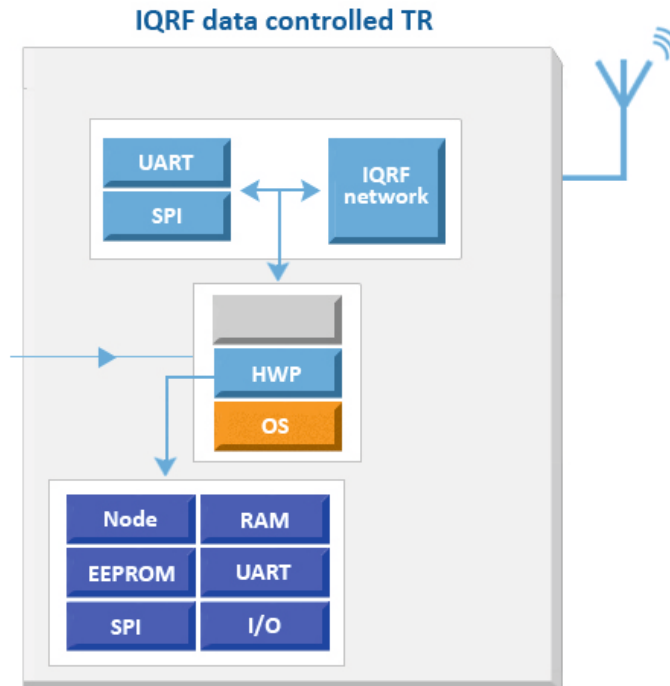
This set contains selected combinations of IQRF devices optimized for development of user's own network DCTR applications (without programming) for advantageous price. Non-standard user-specific tasks can be solved by programmable Custom Handler (see DPA Framework technical guide).

DDC kits are included for demonstration of end nodes with I/Os, sensors and relays.

## DS-MESH-02D

### Development set for IQMESH

Brief User's Manual



### How to start

- Use the GW-USB-05 gateway (with hardware profile Coordinator SPI inside the internal DCTR) as the network Coordinator.
- Use standalone DCTRs (with hardware profiles Node SPI inside) plugged in DK DK-EVAL-04 kits as network end Nodes.
- It is not necessary to upload above mentioned HWP into GW-USB-05 and standalone DCTRs because it is done when delivered from the factory.
- Just a simple configuration of network devices (specification of RF channel, selection of peripherals to be used in individual Nodes etc.) is needed.
- IQRF IDE development environment is a complex SW tool for all design, configuration, management and service requirements. The IQRF Quick start guide describes all needed knowledge concerning installation and basic working with the devices.
- Creation and control of the network is described step by step in DPA Quick Start guide.
- Training by IQRF manufacturer is available for further speeding-up.

Refer to the Flash memory stick included. For further information see [www.iqrf.org](http://www.iqrf.org) (sections Support, How to start and Downloads) for fully programmable approach and [www.iqrfalliance.org](http://www.iqrfalliance.org) for DCTR applications. Detailed description can be found in DPA Framework Technical guide, IQRF OS User's Guide, IQRF OS Reference Guide, IQRF IDE Help and documentation of individual products.



DS-MESH-02D

## Pack list

▪ DCTR-52DAT DemoHWP-Node-SPI uploaded	16 pcs	Data Controlled Transceiver
▪ CK-USB-04A	1 pc	Programmer/debugger
▪ DK-EVAL-04A	15 pcs	Development kit
▪ GW-USB-05 DemoHWP-Coordinator-SPI uploaded	2 pcs	USB gateway
▪ DDC-IO-01	1 pc	I/O kit
▪ DDC-SE-01	1 pc	Sensor kit
▪ DDC-RE-01	1 pc	Relay kit
▪ TY-A6A	1 pc	Power supply
▪ DK-PWR-01	2 pcs	Power supply expansion board
▪ CAB-USBABMICRO	1 pc	Micro USB cable

▪ Data medium DS-MESH-02D	1 pc	USB Flash memory stick with SW and documentation. All the files can also available at <a href="http://www.iqrf.org/download">www.iqrf.org/download</a>
▪ <b>\Step by step guides</b>		
▪ Quick_Start_Guide_DPA	PDF	DPA Quick start guide (DCTR application without programming)
▪ Quick_Start_Guide_IQRF	PDF	IQRF Quick start guide (Installation and working with tools)
▪ <b>\DPA specification</b>		
▪ Tech_Guide_DPA-Framework	PDF	DPA framework technical guide
▪ <b>\Products</b>		
▪ Datasheet_TR-52D	PDF	TR-52D datasheet
▪ User_Guide_CK-USB-04A	PDF	CK-USB-04A User's guide
▪ User_Guide_DK-EVAL-04A	PDF	DK-EVAL-04A User's guide
▪ MNGWUSB05	PDF	GW-USB-05 User's guide
▪ MNDDCIO01	PDF	DDC-IO-01 User's guide
▪ MNDDCSE01	PDF	DDC-SE-01 User's guide
▪ MNDDCRE01	PDF	DDC-RE-01 User's guide
▪ <b>\Accessories</b>		
▪ MNTYA6	PDF	Power supply user's guide
▪ MNDKPWR01	PDF	Power supply expansion board user's guide
▪ <b>\SW</b>		
▪ IQRF-Startup-Package	EXE, ZIP	All-in-one bundle to start with IQRF. DPA (DCTR) as well as non-DPA (fully programmable) approach supported. (TR datasheet, development SW, examples, ...)

## Contacts

IQRF technology	<a href="http://www.iqrf.org">www.iqrf.org</a>
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