

DKT IP Link over Coax (IPLoC) push-on module



IPLoC Top level description

The IPLoC from DKT allows for retrofitting Ethernet connectivity over existing coaxial infrastructures. This is by using MoCA technology. The method to utilize existing infrastructure is by simply inserting an IPLoC device near the router and another IPLoC device near smart TVs. By using a simple self-installable methodology, customers can themselves upgrade their existing in-house coaxial infrastructure. The 47500 IPLoC D2-POM models without WiFi can be combined a number of 47501 IPLoC D2-POM-n with WiFi, and the amount of available WiFi accesspoints throughout the home can be expanded without the need for new visible wiring.

Product specifications:	
Common data for 47500 IPLoC-D2-POM and 47501 IPLoC-D2-POM-n	
Standard:	IEEE802.3az , 802.1p , MoCA 2.0
Transmission PHY rate:	Up to 400 Mbps PHY rate
LAN port data rate	► Typ: >156Mbps (50dB att.) >(TCP/IP) ► Typ: >166Mbps (50dB att.) >(UDP) Up to 70dB attenuation with stable link achievable
Frequency band:	CATV frequency: 5MHz-1002MHz Insertion loss : 3dB(Max.) Return loss: 8dB(Min.) MoCA D-Band: 1125-1675MHz(Total 11 channel) Insertion loss: 3dB(Max.) Return loss: 8dB(Min.)
Nodes:	Up to 16 devices, mesh network
Interface:	10/100/1000 Mbps: Ethernet port(RJ-45) x 1 Wall outlet Radio: Male IEC (Plastic/non-functional) Wall outlet: Female IEC Output TV: Male IEC
Button:	1pcs, Reset/Reset to Default
Temperature:	0-40°C(Working) / -5-65°C (Storage)
Communication distance:	100m (max.), cable between root node and outlet (RG-59)
OS:	Supports Windows OS , Linux OS, MAC OS
Power supply:	100-240VAC , 50/60Hz Input 5VDC +/-5% , 1A Output
Power saving mode:	ErP Level-V(lot 6)
Dimensions:	95x50x27 mm
Model specifik data for 47500 IPLoC D2-POM	
LEDs:	3pcs, Power (power on: green)/ MoCA (green link)/ Ethernet (link green, activity blinking)
Power consumption:	2.5W (max), 1.3W (typ)
Model specifik data for 47501 IPLoC D2-POM-n	
LEDs:	4pcs, WiFi (green when ready, blinking if IP address are unassigned)/Power (power on: green)/ MoCA (green link)/ Ethernet (link green, activity blinking)
Power consumption:	<7W (max), 4.2W (typ)
Wireless protocol	IEEE802.11B/G/N transmission up to 150MBPs
Wireless security	64/128/152 WEP WPA-PSK/WPA2-PSK,WPA/WPA2
Operating frequency range	2412 MHz-2484MHz(channel 1 - channel 14)
Transmission power	802.11n 17±1dBm, 802.11g 17±1dBm, 802.11b 19±1dBm
Receiver sensitivity	802.11b <-76dBm;802.11g <-65dBm 802.11n(20M) <-62dBm;802.11n(40M) <-55dBm
Maximum concurrent users	20
Router modes	AP, Client, Bridge mode
Operating system	DKT Open WRT (flexible platform)

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Push-On-IPLoC

The Push-On-IPLoC is the most universal component to enable IP services over existing coaxial infrastructures.

The standard outlet across Europe has architecture with one dedicated TV and one Radio port. This is based on IEC adapters separated by 30mm and sometimes supplemented with a dedicated DOCSIS data port (commonly known as the Multimedia port). The Push-On-IPLoC enables the consumer to remove the connectors from the wall outlet, insert the Push-On-IPLoC and inject IPTV, Internet and telephony (IP traffic in general) services into the existing Cable-TV (DVB-C/T) distribution coaxial network.

Near router (far end to the TV set):

The PDS cable from an available RJ-45 port is simply connected to the RJ-45 port on an IPLoC device. The IPLoC device is inserted into the TV outlet closest to the router. IP services are enabled throughout the coaxial distribution network in the home.

Near the TV / Set-top-box / other IP clients (near end to the TV set):

Simply plug the Push-On-IPLoC into the TV's wall outlet and connect the power. The device auto-negotiates with the other IPLoC devices and establishes an optimized point-to-multipoint network.

Optional WLAN:

A WLAN enabled IPLoC device allows the wireless network in the home to be expanded with new wireless network coverage areas. The philosophy is that multiple smaller WLAN cells will provide better home coverage than a single large cell. The WLAN cells from the WLAN-enabled IPLoC devices will supplement the WLAN cell from the primary wireless router. Connection to devices is established with minimum effort by pressing the Wireless Protected setup button.

