

## *Dynamic ingress blocker*

# Gate-65



### *Product information:*

Dynamic ingress blocking (DIB) is a technology to improve signal to noise ratio in the reverse path of the CATV networks, which achieves a significant reduction in packet loss and thereby increasing the speed of data transfer and increasing the capacity of the networks. This is achieved by mounting the DIB devices on each CATV network branch, serving a small number of modems. While all modems in CATV network branch are inactive (“silent”) DIB device hold reverse path blocked, thereby preventing its generated noises to penetrate the rest of the network. In the event of a signal from a modem connection to the network is performed again. Thus, in each period of time (time division) in the CATV network noise enters only from the branch, which has an active modem.

### *Application:*

*Gate-65* is a device realizing DIB function compatible with DOCSIS and EuroDOCSIS standards. Minimum time session can be easily adjusted in wide limits. For mounting on every CATV branch, serving a small group of modems. Minimum insertion loss in forward path. Hermetic case which allows mounting in places with high humidity.

**Features :**

- Adjusting time session duration
- Compatibility with DOCSIS 1.1 / 2.0 / 3.0 and EuroDOCSIS 1.1 / 2.0 / 3.0
- Easy monitoring and location of CATV branches with high noise level
- Selectable power- up delay of power supply
- Index of protection IP65
- Coaxial connectors 5/8"
- Compact design, easy for mounting and adjustment.

**Technical specifications:****Forward path (passive):**

Bandwidth	85 ÷ 862 MHz
Insertion loss	-2 dB
Flatness	± 0.75 dB
Return loss	≥ 18 dB / 75 Ω

**Reverse path (active):**

Bandwidth	18 ÷ 65 MHz
Gain	0 dB
Flatness	± 0.75 dB
Return loss	≥ 18 dB / 75 Ω
Isolation	-45 dB
Adjusting time session duration	3.12; 6.25; 12.5; 25; 50; 100; 200; 400 μs

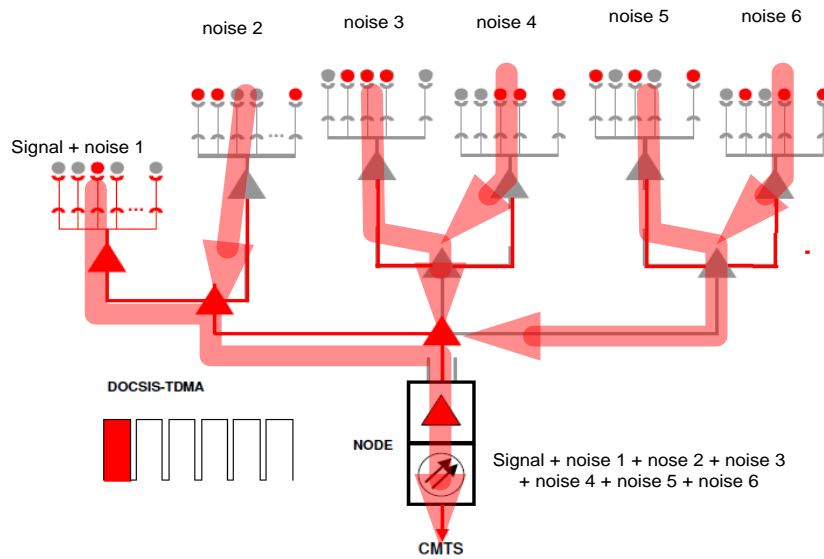
**Power specification:**

Supply voltage	35 ÷ 70V AC (option C) 230V AC (option M)
Power consumption	2 W
Power-up delay (selectable)	3; 4; 5; 6 s (option C)
Hum modulation	61 dB @ 7.5 A AC

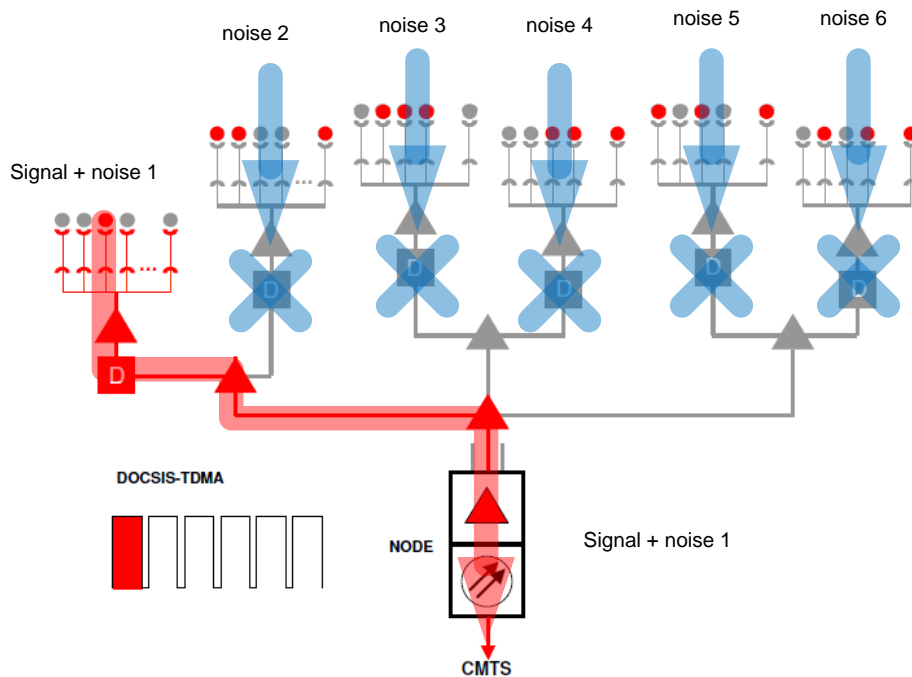
**Dimensions and working environment specification:**

Dimensions (W x H x D)	165 x 100 x 145 mm
Operating temperature range	-20 ÷ 60 °C
Weight	0.900 kg
Index of protection	IP 65

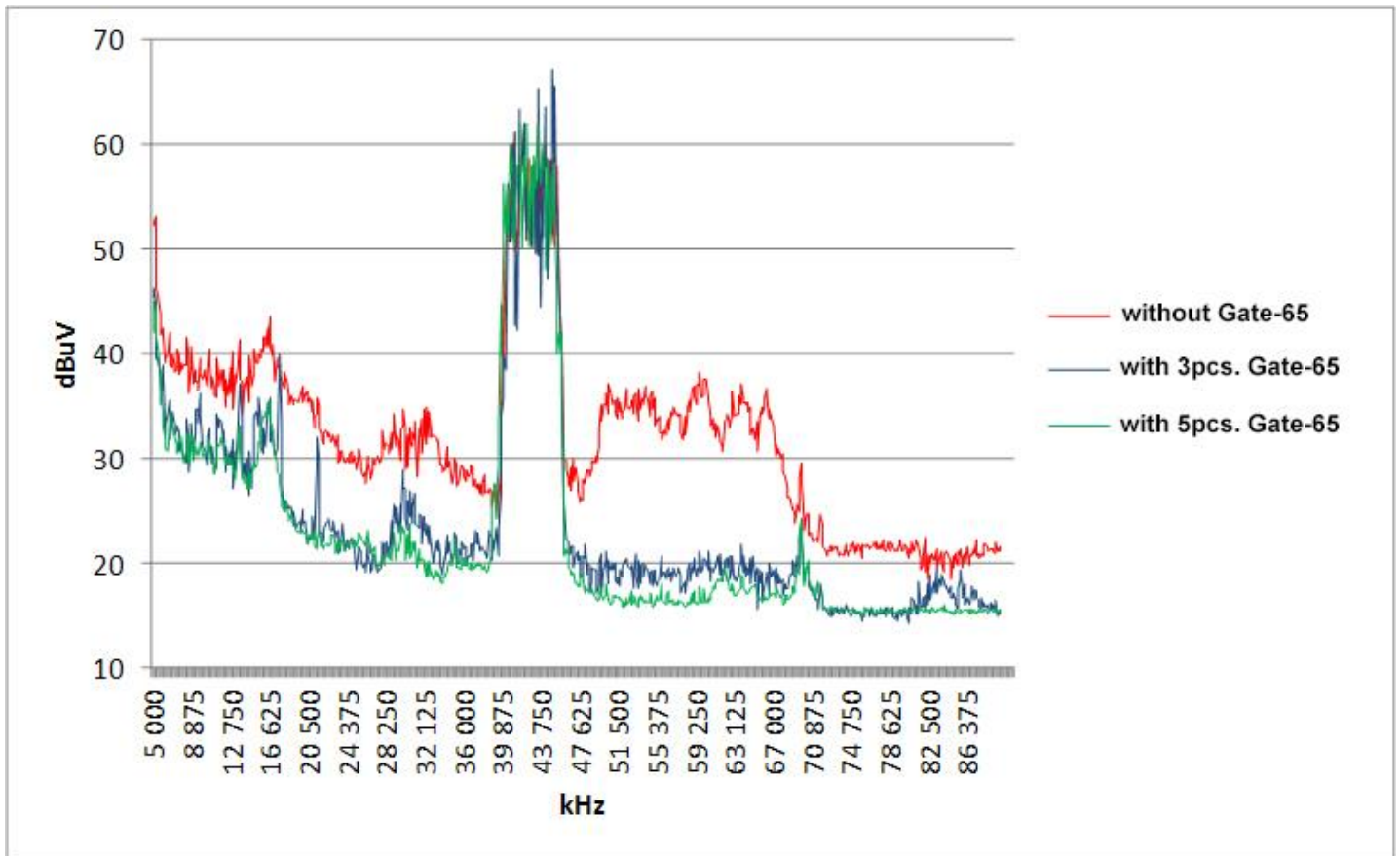
**Block scheme and diagrams:**



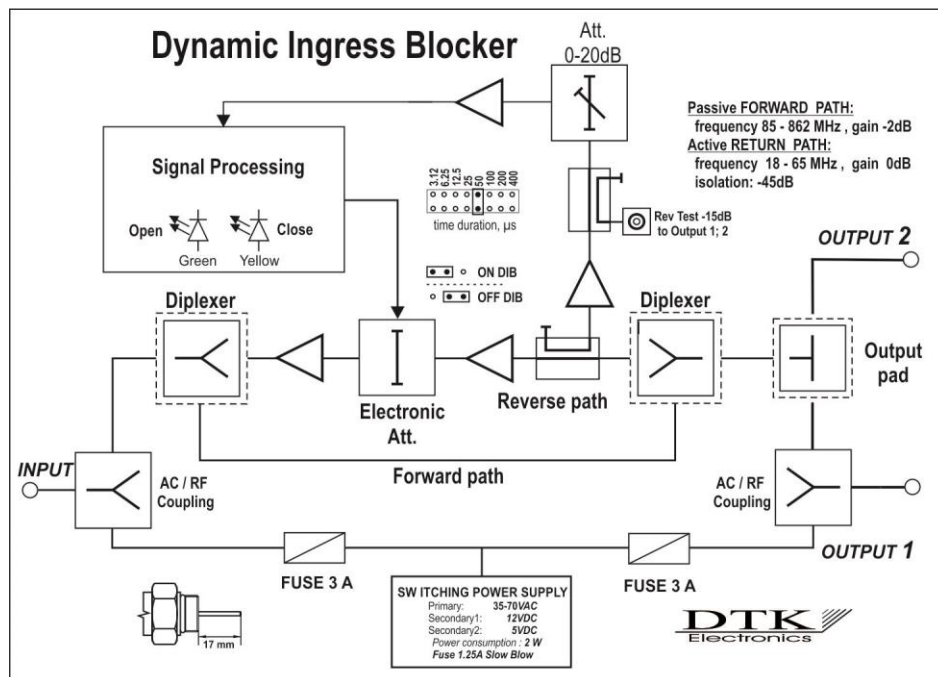
*Noises in CATV network without Gate-65*



*Noises in CATV network with installed Gate-65*



*Signal to Noise ratio in CATV network with different number of installed Gate-65*



*Block scheme of Gate-65*