



GENERAL CHARACTERISTICS

Communication converters are used in order to unify communication channels used on substation. There are two types of communication channels on substation:

- telecontrol channel – control and signalling purposes
- diagnostic channel – disturbances and event recorders reading, measurements, setting etc.

In most cases substation is unmanned. The substation devices are connected to the star point, and the star point is joined to computer network, which enables continuous monitoring of substation. The connection of a few OPG-1/2/IZ devices serves as communication equipment which allows to configure both telecontrol and diagnostic purpose communication channels. Such connection enables connecting many different devices of different types and transfer data through one communication channel.

MAIN FEATURES

OPG-1 converter is equipped with:

- one fiber-optic ST port (820 nm – multimode)
- one RS-485 port (parallelly one RS-232 port)
- 220-250V AC/DC or 24V AC/DC supply module

OPG-2 converter is equipped with:

- two fiber-optic ST port (820 nm – multimode)
- one RS-485 port (parallelly one RS-232 port)
- 220-250V AC/DC or 24V AC/DC supply module

OPG-IZ converter is equipped with:

- one RS-232 port
- one RS-485 port
- 220-250V AC/DC or 24V AC/DC supply module

OPG-IZ-1 converter is equipped with:

- one RS-232 port (with additional fiber-optic ST port – 820 nm multimode)
- one RS-485 port
- 220-250V AC/DC or 24V AC/DC supply module

OPG-IZ-2 converter is equipped with:

- one RS-232 port (with additional two fiber-optic ST ports – 820 nm multimode)
- one RS-485 port
- 220-250V AC/DC or 24V AC/DC supply module

TECHNICAL DATA

Rated supply voltage	110-230V DC/AC or other on request ex. 24V DC
Burden in supply voltage	PZ<2W
Communication ports	depending on converter type
Dimensions	75x55x110
Weight	0,3kg
Ingress Protection	IP40
Ambient temperature	-5÷40°C
Mounting	TS35 rail

PRINCIPLE OF OPERATION

All types of communication converters are equipped with isolated supply voltage modules. OPG-IZ are characterised by isolated communication ports too.

OPG-1 converter is standard RS-485/232 to fiber-optic ST port converter.

OPG-2 converter is additionally equipped with another fiber-optic ST port. If RS-485 or RS-232 port is set to MASTER, the converter operates as a star coupler.

Isolated converter of type OPG-IZ serves as RS-232 to RS-485 converter.

Isolated OPG-IZ-1 converter is additionally equipped with fiber-optic port which works parallelly to RS-232 port. The converter serves as a star coupler.

Isolated OPG-IZ-2 converter is additionally equipped with two fiber-optic port which works parallelly to RS-232 port. The converter serves as a star coupler.