

## Purpose:

- the subscriber loop multiplexer F4/12 is designed for physical subscriber lines multiplex on the base of xDSL technologies comprehensive use. The subscriber loop multiplexer F4/12 is a digital transmission system via one balanced copper pair of 4/8/12/16 channels with 272/528/784/784 Kbit/s rate correspondingly;
- allows organizing  $n \cdot 64$  Kbit/s auxiliary communication channel with Ethernet interface (optical);
- provides operation with all types of analog and digital automatic telephone exchanges with an opportunity of telephone sets connection both with frequency and DC dialing, automatic number identification, faxes and modems support;
- allows the repeater's switching-on.

## Structure:

The subscriber loop multiplexer F4/12 structurally consists of two terminal sets (subscriber set and fixed set) and produced in two versions:

- integrated into the electronic automatic telephone exchange FM – fixed set is the exchange-internal group module circuit board MGC8, designed for the case-mounting exchange line unit of the electronic automatic telephone exchange F and FM;
- self-contained – subscriber set and fixed sets are performed in separate desktop and wall-mounted cases.

Max. distance between subscriber set and fixed set is defined by a communication line operative attenuation on a frequency of 500kHz, which shouldn't exceed 48dB.

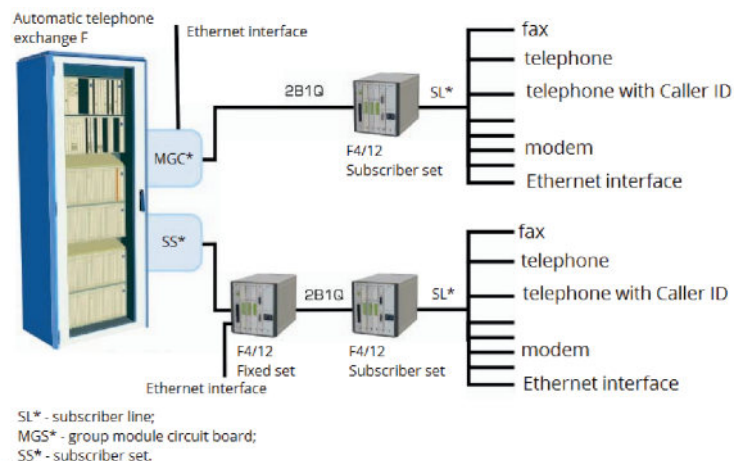


fix

Cable type	Length
KCPP-1,2	Up to 18 km
KCPP -0,9	Up to 12 km
TPP-0,5	Up to 6 km
TPP-0,4	Up to 3,5 km

## Advantages of F4/12:

- protection circuit (thunderstorm protection) is available both on the side of line link and subscriber lines.
- F4/12 may be equipped with the telemetering and signaling module (MT), designed for a subscriber line parameters control.



## Basic technical characteristics of F4/12:

Line code	2B1Q		
	Fixed set		Subscriber set
Bond resistance	C22		Z
Line loop resistance	Less than 300		
Call indicator sensitivity	From 35 to 100		
Detected calling frequency, Hz	From 15 to 55		
Dialing	Impulse or TDMF		
Input signal rated level, dB	0		0
Output signal rated level, dB	-5±0.5		-5±0.5
Max. loop resistance of subscriber line, Ohm			1800
Rms value of call signal voltage, V			No less than 35
Call signal frequency, Hz			25±0.1
Case dimensions (H×W×D), mm			240×260×230
Set weight in moisture proof enclosure (subscriber set), kg.	Less than 10		
Power supply, V	MGS8	Fixed set	Subscriber set
	From operational carrier power unit of the electronic automatic telephone exchange FM	From system network. 60V	Remotely from fixed set* or from AC network 220V

\* remote powering of a subscriber set from a fixed set is possible at the subscriber set connection to the line cable with an electric conductor in diameter from 0,5 mm and more.

### Subscriber set operation conditions:

the subscriber set is designed for continuous 24-hour operational mode at the temperature -40°C ... 50°C and relative humidity up to 98 % at the temperature 25°C.

### Certificates:

№ BY/112 03.11.030 04627 – The National Certificate of Conformity of the Republic of Belarus, issued by the certification body of telecommunication facilities and services OJCS "Giprosvyaz";

The Certificate of Production of domestic manufacture № 644.1/6473-1, issued by the Chamber of Commerce and Industry of the Republic of Belarus.

