

MOBILE AUTOMATIC TELEPHONE EXCHANGE FMM

СВЯЗ
инвест

Sphere of application:

Mobile communications centers of command posts of security agencies, other state public authorities and organizations.

The mobile automatic telephone exchange realizes:

- organization of automatic (or via a telephone operator) telephone communication with the subscribers of its command post;
- organization of automatic (or via a telephone operator) telephone communication with the subscribers of other operations control rooms, public telephone networks, departmental communication networks;
- organization of long-distance communication (manual switch electronic analog);
- fulfillment of channelizing and multiplexing functions.

The mobile automatic telephone exchange provides:

- connection of 240 analog ports;
- 2 - wire analog subscriber lines;
- 4 - wire analog subscriber lines;
- 2 - wire tone frequency channels;
- 4 - wire tone frequency channels;
- 2 - wire subscriber lines with a local battery and magneto call;
- 1 - wire interconnections;
- connection of 30 digital subscriber lines;
- connection of 12 analog subscribers per one cable pair via each imbedded sealing system (F4/12);
- connection of 12 E1 digital flows.



Advantages:

- flexibility of the construction of direct communication networks and directions of various purpose;
- loudspeaker telephone equipment imbedded in the mobile automatic telephone exchange FMM;
- modems for the operation via a copper and FO (fiber optic) cable imbedded in the mobile automatic telephone exchange FMM;
- subscriber sealing equipment imbedded in the mobile automatic telephone exchange FMM (provides the transmission of 12 numbers per one cable pair at a distance of 12 km);
- operation as an open communication manual switch on the base of PC or digital panel. The mobile automatic telephone exchange FMM makes it possible to replace a channelizing equipment vehicle, manual switch and the mobile automatic telephone exchange old equipment vehicle simultaneously;
- operation as a primary multiplexor. The mobile automatic telephone exchange allows to allocate tone frequency channels and local batteries from E1 digital flow for external loads (communication security equipment, tone - telegraphing equipment, direct communication equipment, alert equipment and etc.), to organize $n \times 64$ K bit/s channels with 10 BaseT Ethernet interface for a data transmission network;
- operation with tone frequency channels and local battery subscribers;
- organization of the imbedded voice recording (registration) system;
- diagnostics and measurement of basic characteristics of physical subscriber lines;
- support of CLIP function with FSK modulation (the identification of a calling subscriber's number);
- wide range of an operating voltage and power supply frequency (the opportunity of working with a reduced (unstable) industrial network or diesel - generator voltage);
- the mobile automatic telephone exchange provides connection of other telecommunication equipment to the imbedded uninterruptible supply system;
- fulfillment of the requirements for a defensive electronic warfare, vitality and resistance to external influencing factors (forced ventilation and heating during cold and hot period of the year);
- opportunity of changing of the technical features and dimensions at the Customer's request;
- high reliability;
- warranty at the Customer's request is up to 5 years;
- opportunity of upgrading of the Electronic Switching System equipment rooms of an old park by simple replacement of the equipment;
- opportunity of a simultaneous replacement of old channelizing equipment vehicles, open communication switch equipment vehicles and the mobile automatic telephone exchange. It increases communication reliability.



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The mobile automatic telephone exchange meets the following requirements:

Defensive electronic countermeasures:

- the automatic telephone exchange allows realizing operation in the same facility with radio stations, which working frequency range is from 1.5 MHz to 10 GHz;
- the automatic telephone exchange is not sensitive to the influence of the electronic component, which intensity is 120 dB/μV/ (1 V/m) within the frequency range from 0.15 to 1000 MHz;
- the automatic telephone exchange is resistant to interference voltage effecting via electrical feed circuit 125 dB/mkV (1,8V), also via control and commutation circuit 100 dB/mkV (1V) within the frequency range from 1,5 MHz to 1000 MHz.

Vitality and resistance to external factors:

- resilience, durability, resistance of the automatic telephone exchange to external influencing factors meet the requirements of the operating group 1.7 GOST standard B 20.39.304-76 of the climatic version "humid microthermal climate" with the following clarifications:

raised humidity is 98 % at the temperature of +25 °C;

reduced working temperature is -10 °C;

reduced limiting temperature is -40 °C;

raised working temperature is +40 °C;

raised limiting temperature is +65 °C;

ambient temperature change within the range from -40 °C to +65 °C;

frequentative multiple shocks with a shock acceleration peak value – 98 m/s (10g);

sinusoidal vibrations within the frequency range if 10...200 Hz at the acceleration of 19.6 m /s (2g).

- floor and wall mounting of the frame provides the vibration absorbing special devices.

Reliability:

- the automatic telephone exchange mean operating time between failures is no less than 100 000 hours;
- mean life time of the automatic telephone exchange is no less than 10 years.

Power supply:

the power supply of the mobile automatic telephone exchange FMM can be carried out both from 60V and 27V DC network and from the monophasic AC network, which voltage is 220 V (operating voltage range is from 150 to 310 V) and frequency is 50 (45–66) Hz.

Dimensions:

высота – Height – 1454 mm, width – 735 mm, depth – 490 mm. The dimensions are given with consideration of the mountings and the vibration absorbing special devices. The dimensions can be changed at the Customer's request.

Delivery set includes:

- The mobile automatic telephone exchange with the imbedded power supply system and switches;
- SPTA (spare tools and accessories).

The Customer determines the mobile automatic telephone exchange configuration, the number of subscribers, the type and the number of administrator and operator's workstations.



Certificates:

№ BY/112 03.11.030 04537 – 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.

The Declaration of Conformance of the Customs Union №TC BY/112 11.01.TP004 030 00858, issued by Minsk State Executive Committee.

