

DGT 3450-1 WW

field switch



Highest reliability and secure communication in a field-proven communication system

Communication in TDM and VoIP technology

DSTG gateway features

Easy to configure and monitor

DGT 3450-1 WW field switch is a digital state-of-the-art product designed especially for the army.

It guarantees reliability on the battle field and ensures smooth and stable operation with various telecommunication systems.

DGT 3450-1 WW meets all NATO requirements defined for this type of units.

Most DGT 3450-1 WW switch operation parameters may be configured and monitored through software which provides fast and easy rearrangement of traffic in case of line failure or the command unit relocation resulting from dynamics of tactical operations.

DGT 3450-1 WW field switch supports communication in both TDM and VoIP technology. It is possible to carry out dispatch communication on the command level automatically or semi-automatically using system sets and command consoles.

DGT 3450-1 WW field switch is equipped with Digital Strategic to Tactical Gateway (DSTG) features.

DGT 3450-1 WW field switch is designed for arranging military communication systems in field conditions. The switch may operate as:

- a telecommunication node of a field telephone network for tactical or operations groups;
- a dispatch switch of a command system with digital command consoles featuring hot line options, visual monitoring of the assigned line and terminal status and calling line identification (it is possible to grant rights to command consoles and set up conference calls in a hierarchical way);
- VoIP network gateways to TDM network.

DGT 3450-1 WW field switch supports call setup for the following lines:

- analogue subscriber lines,
- ISDN subscriber lines,
- digital system lines,
- VoIP digital lines,
- strategic and tactical trunk networks
- public trunk networks.

- software: database editing, messages in Polish or English meeting interoperability requirements in NATO forces;
- configuration prepared according to operation requirements defined by the system user;
- easy and fast traffic rearrangement in case of failure or command relocation resulting from dynamics of tactical operations;
- interoperability with all telecommunication systems compliant with ETSI/ITU standard;
- gateway between a strategic network and DSTG STANAG 4578 ed2 tactical network (between EuroISDN networks compliant with STANAG 4206-4214 group);
- integrated VoIP gateway (SIP, H.323) which supports connecting VoIP subscribers to the switch and switch networking using IP lines;
- interfaces and features of tactical networks compliant with Stanag 4206, Eurocom D/1(86);
- it is possible to create an alternative switched data transmission network utilizing 64 kbit/s bitrate channels or $n \times 64$ kbit/s bitrate channels as well as setting up video-conference calls.
- higher reliability achieved by redundancy (hot reserve) of the most important system components.

DGT 3450-1 WW field switch is equipped with DSTG gateway features. The gateway feature supports communication between tactical and strategic network. Thus, users may port their services between networks which incorporate signaling interoperability, numbering plan and routing, phonic band transcoding feature and data transmission conversion. DSTG levels out clock instability on both sides of the gateway using rate buffering features.

Capacity: up to 192 analogue ports or up to 96 digital ports and up to 12 PCM trunks with various signaling;

Expansion board packets:

- analogue packet: 16 ports,
- ISDN/system digital packet: 4 or 8 ports,
- E1 trunk packet: 2 or 4 ports,
- tactical packet: 2 configurable ports: Stanag 4206 or Eurocom D/1(86),
- carrier line packet (i.e. E&M): 6 ports,
- carrier line packet Stanag 5040: 6 ports,
- PSTN line packet: 8 ports,
- VoIP gateway packet: up to 128 channels;

Signaling: DSS1, ISDN, QSIG, E&M, R2, ASS, DTMF, LB, DLB, SIP, H.323, Stanag 4208, Stanag 4578 version 2, Stanag 5040, Eurocom D/1(86);

Reliability: doubling of main components (control unit, power supply);

Operation type: continuous;

Interfaces: BRI, PRI, E1, E&M, CB, MB, MMA, Ethernet (VoIP), Stanag 4206, Eurocom D/1(86). PLT packet on interfaces STANAG 4206, Eurocom D/1(ES), ISDN extended by DSTG tactical features;

Dimensions and weight of the switch: (width x height x depth in mm) 535x355x710, ~60kg;

Dimensions and weight of a power plant integrated with batteries: (width x height x depth in mm) 534x217x600, ~50kg;

Dimensions and weight of the cable case: 800x620x340, ~ 25kg;

Direct power supply of the switch: 24VDC with negative ground;

Power supply for the switch using a power module: 230V AC;

Operating temperature: from -30°C to +50°C;

Storage temperature: from -50°C to +65°C;

Relative humidity: from 30% to 98%;

Atmospheric pressure: from 800hPa to 1100 hPa;

Resistance requirements compliant with: WPN-84/N-01003;

Level of closed case protection with control and switch components outside: IP 65 compliant with IEC 529 and PN-92/E-08106;

Thermal resistance: compliant with MIL-STD-810 C;

Resistance to obstacle collision: compliant with MIL-STD-810 C (15g/6ms 4000 strokes);

Resistance to vibrations: compliant with MIL-STD-810 C;

Resistance to strokes: compliant with MIL-STD-810 C;

Electromagnetic compatibility: (EMC) compliant with VG 95373 test;

Electric connector parameters: tightness compliant with MIL C 26482 and resistance to vibrations compliant with MIL-STD-202;

Color compliant with: WPN-84/N-01004;

The selected features of DGT 3450-1 WW field switch

DSTG gateway feature

Technical specification for DGT 3450-1 WW switch

