SWITCH MATRIX & SPACE PRODUCTS CAPABILITY GUIDE

OUR EXPERTISE, YOUR SWITCH SOLUTION SINCE 1945
BETTER.FASTER.MODULAR
NEXT GENERATION MATRIX

Commercial-Off-The-Shelf (COTS) solutions supporting the aerospace, military, transportation, and communication industries for signal routing and ATE applications.

• Highly scalable and modular
• Trouble-free maintenance for field upgrades & repair
• 1RU/2RU/3RU/4RU rack mountable enclosures
• LCD/Keypad or Touch Screen manual control
• Remote controls:
  Ethernet (TCP/IP) with HTTP Server or SNMP v1/v2
  or GPIB & RS-232 and USB port

Electromechanical Switching Systems
- DC to 40 GHz
- Faster switching time at system level
- Keeps track of the life of each switch
- All electronic components are RoHS compliant
- Field upgradable firmware via boot loader
- Switches can be mixed & matched
- Configured either as a MUX, a Crossbar or individual switches
- Normally Open & Latching switches
- Terminated or non-terminated solutions

Fiber Optic Matrix
- C-band
  Switching in Optical Domain
  Fan-Out / Crossbar
  16x16 Matrix, LCD Touch Screen & Ethernet remote control

Solid State Matrix
- HF to S-band
  6x6 to 12x16 unidirectional, redundant power supplies,
  removable hard drive, LCD Touch Screen & Ethernet remote control

MS-Control Kit
- Do-It-Yourself (DIY)
  Software control via RS-232, USB with
  either GPIB or Ethernet (TCP/IP) & HTTP Server.
  Controls up to 20 Dow-Key CAN Bus switches.
  Expansion cards available as an option

Integrated Switching Systems & Custom Solutions

- C-band
  Full Rack Modular Solution
  16x32 expandable to 32x64
  Non-Blocking Full Fan-Out
  Manual and Remote Control

- L-band
  Duplex Transmitter & Receiver Racks
  12x48 Fan-Out & 48x12 Fan-In Solution
  Equipped with signal monitor panels, fiber optic receiver, amplifiers, switching modules, master & slave controller.
  Manual and Remote Control

- L-band
  4x8 Solid State Fan-Out Switch
  48x4 Solid State Fan-In Switch
  8x2 Electromechanical Switch
  LCD Touch Screen
  Ethernet with SNMP protocol

OUR HERITAGE, YOUR SWITCH SOLUTION

Space business experts stress the three most critical aspects of supplier selection: heritage, heritage, heritage.

Our lightweight (less than 55 grams) and highly reliable qualified transfer switches are used in programs such as Inmarsat-4 and Galileo satellite systems.

Innovative and proven high reliability SPDT switches have played a part in hundreds of successful space missions.

Dow-Key distinguishes itself by introducing random drive T-Switches, which minimizes the switching time rather than forcing the application to switch RF paths in sequential order. Qualified on INSAT-3 MUOS, G-SAT and TDRS programs.

Dow-Key WR/G is used in high profile space mission such as Kepler (flight system) and Deep Impact (NASA space probe).

Dow-Key’s outstanding HI-Rel track record has evolved in combining space qualified switches and other components such as power dividers in a block of switches to achieve the matrix complexity needed in programs such as GPS, GOES, Inmarsat-4, and other programs.

More info at http://www.dowkey.com/space_brochure.php