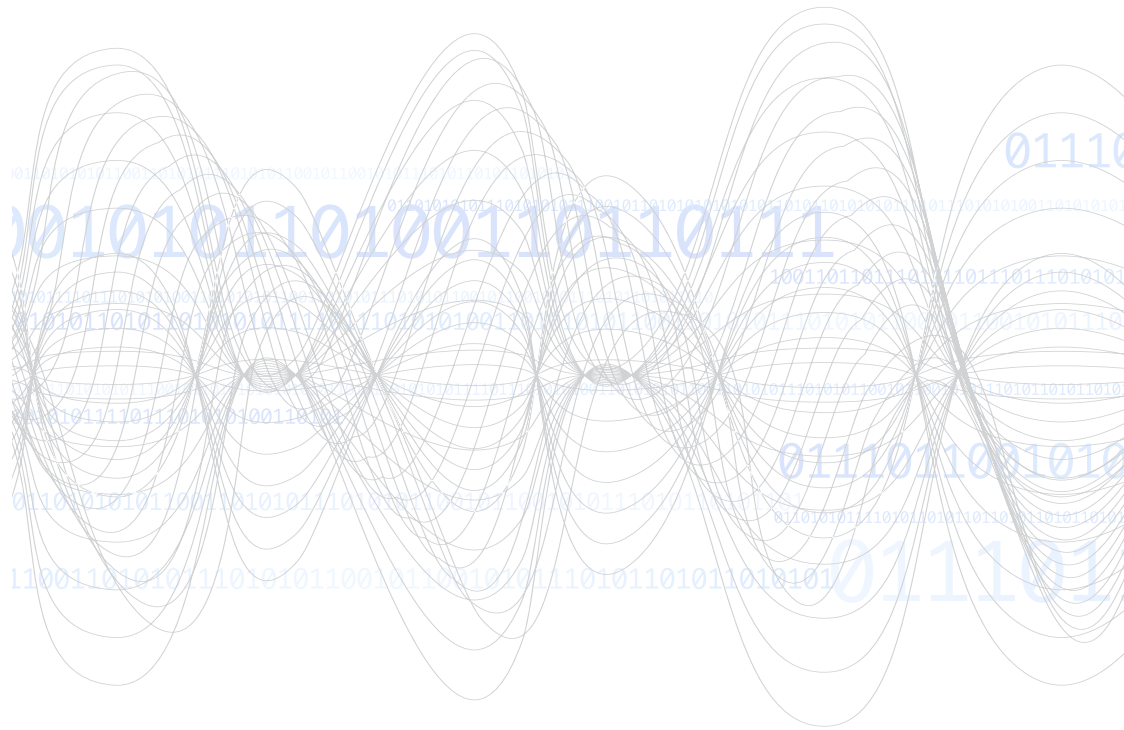


# SWITCH MATRIX & SPACE PRODUCTS CAPABILITY GUIDE



**DowKey® Microwave**  
CORPORATION

A **DOVER** COMPANY

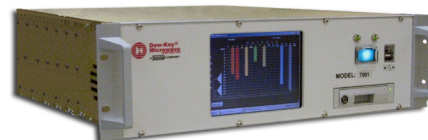
**OUR EXPERTISE, YOUR SWITCH SOLUTION  
SINCE 1945**

# BETTER.FASTER.MODULAR NEXT GENERATION MATRIX

Commerical-Off-The-Shelf {COTS} solutions supporting the aerospace, military, transportation, and communication industries for signal routing and ATE applications.

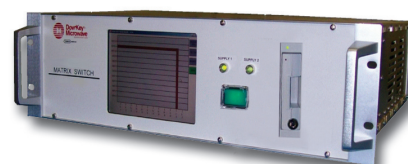
- Highly scalable and modular
- Trouble-free maintenance for field upgrades & repair
- 1RU/2RU/3RU/4RU rack mountable enclosures
- LCD/Keypad or Touch Screen manual control
- Remote controls:  
*Ethernet (TCP/IP) with HTTP Server or SNMP v1/v2  
or GPIB & RS-232 and USB port*

## 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*

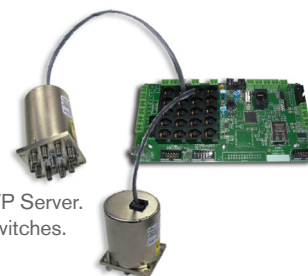


## Electromechanical Switching Systems

*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*

## 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*

*Systems are fully controlled through controller module(s) with Windows based PC and removable hard drive.*



*L-band  
4x48 Solid State Fan-Out Switch  
48x4 Solid State Fan-In Switch  
8x2 Electromechanical Switch  
LCD Touch Screen  
Ethernet with SNMP protocol*

**More info at [http://www.dowkey.com/matrix\\_catalog.php](http://www.dowkey.com/matrix_catalog.php)**

# OUR HERITAGE, YOUR SWITCH SOLUTION

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



**411HQ DPDT**



**421H SPDT**

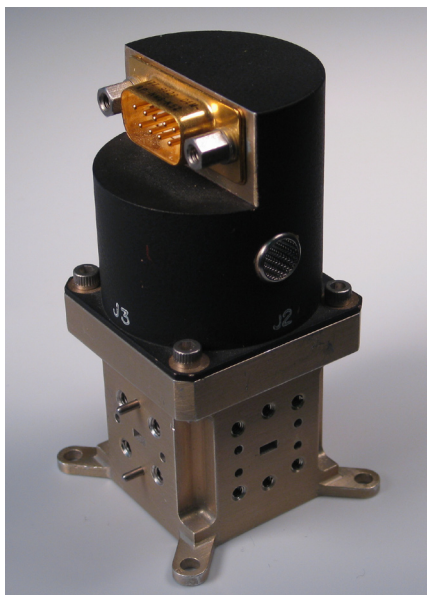
Our lightweight (less than 55 grams) and highly reliable qualified transfer switches are used in programs such as Inmarsat-4 and Galileo satellite systems.

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



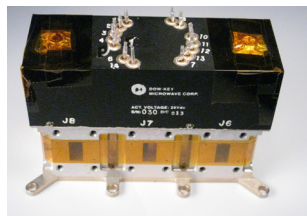
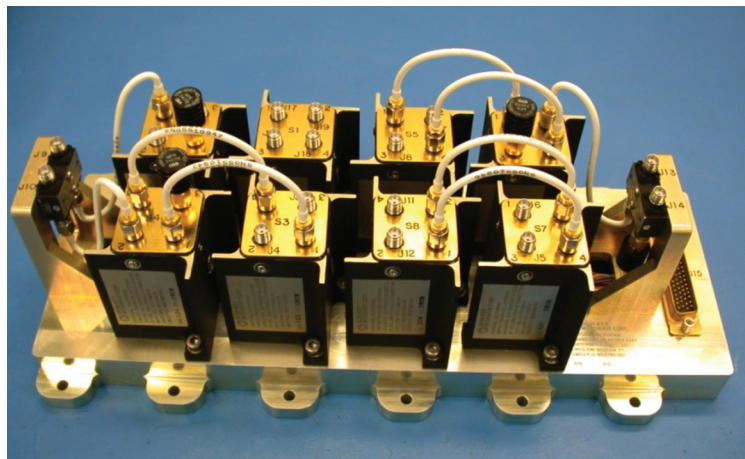
**High Power T-Switch**

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.



**WR-15**

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



**222D-Series**

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](http://www.dowkey.com/space_brochure.php)