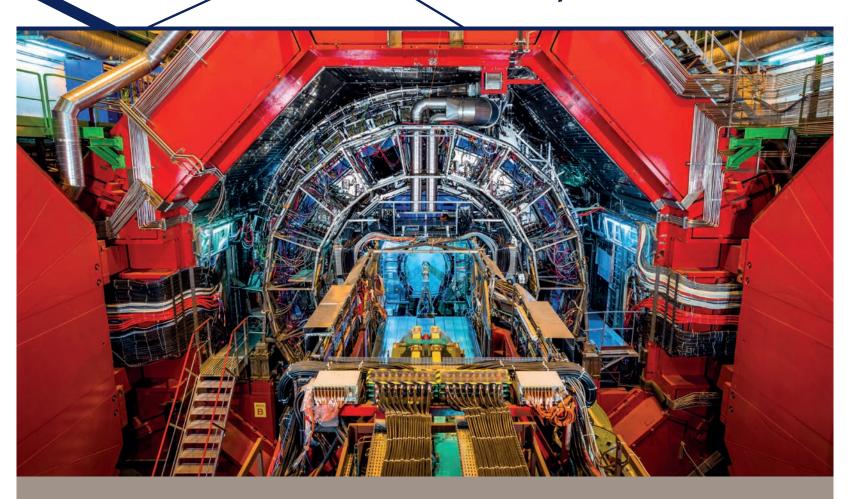
# e2v pulsed power solutions



## High power, high voltage, high reliability

e2v has over 4o years' experience in supplying high power, often bespoke, components to the global scientific market. e2v offers a range of products for high energy physics application thyratrons, spark gaps and modulators. These products serve in particle accelerators, kicker magnets, pulse generators, high voltage protection systems and both the 3rd and 4th generation synchrotron light sources.

ezv offers superior quality products that are backed by excellent after-sales service and support. By investing in continuous product and technology development and working closely with its customers, ezv aims to serve both today's and tomorrow's complex scientific market requirements.

e2v has a worldwide presence with facilities in Europe, North America and Asia Pacific regions.



## **Thyratrons**

e2v is the preferred supplier of hydrogen thyratrons into HEP applications, which are used as high peak power electrical switches. They switch high peak pulse currents on demand and recover rapidly to allow high repetition rate operation.

### **Thyratron features:**

- Bespoke, niche products
- Glass, metal/ceramic or multi-gap ceramic envelopes
- ---> Hydrogen or Deuterium filled
- ---> Reliable, with predictable life
- ••• Very high capacity reservoir system available
- ---> Long life Barium Aluminate cathode available
- ---> Precise switching parameters

## Spark gaps

Spark gaps are a cost-effective, complementary technology, capable of efficiently discharging large pre-determined amounts of energy at high repetition rates (two electrode devices) or discharging at variable voltages on demand (triggered three electrode devices).

#### Thyratron and spark gap applications:

- ----> High-energy switching
- ---> Pulse generation
- ---> Surge protection
- ··· Kicker magnets
- Linac modulators
- → EMP generation
- ----> Lasers
- ---> Protection devices





## Solid-state modulator

e2v offers a range of compact modulators based around our patented solid-state switching technology for radar and linear accelerator applications. Consisting of a power supply, a solid-state switch and an integral control unit, they have been designed to drive e2v's range of magnetrons in scientific and medical applications. When combined with an e2v magnetron, the high voltage compact modulator provides a high energy, pulsed microwave source from a prime three-phase power input.





## Magnetrons

e2v's range of S-band magnetrons offer high peak and mean power, and long life. The recently improved design provides enhanced operational performance and is designed to work with both line type modulators and e2v's solid state modulators.