

[www.caen.it](http://www.caen.it)



# CAEN

*Tools for Discovery*

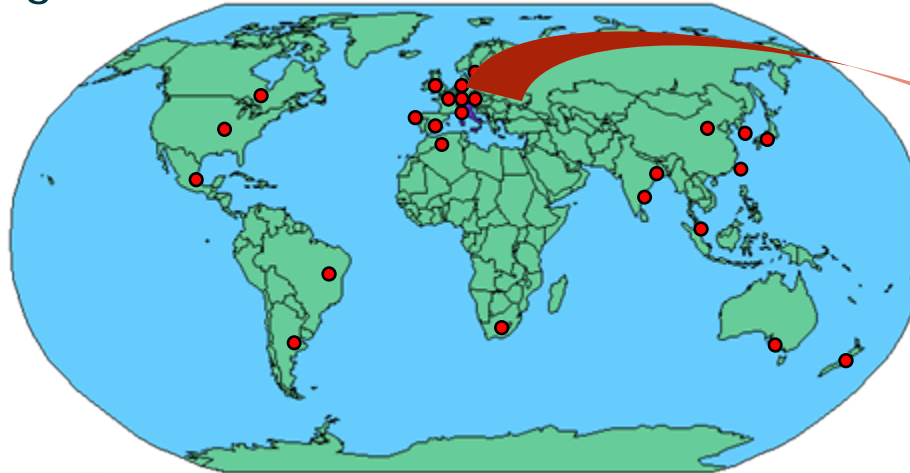


**October 2010**

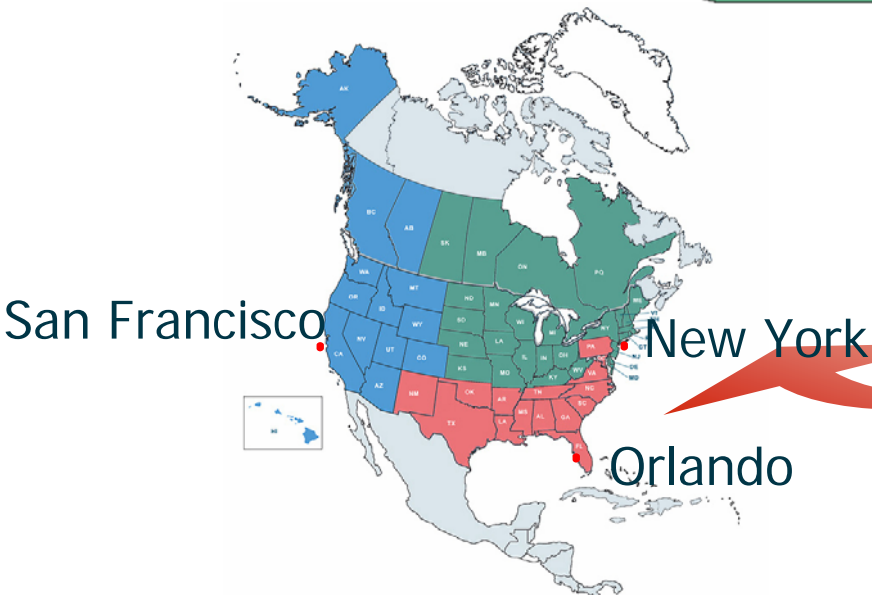


# Where are we?

Solingen, DE



Headquarters



Branches

Viareggio  
Isola d'Elba



# CAEN Network's Companies

- **CAEN SpA** (Costruzioni Apparecchiature Elettroniche e Nucleari SpA) is an important **industrial** spin-off of the INFN (Istituto Nazionale di Fisica Nucleare)
- **CAEN** is recognized world wide as one of the leading companies in the **Electronic Instrumentation** field.
- **CAEN Network's Companies**: the experience in its field allowed **CAEN** to create spin-offs in new sectors as Aerospace, Microelectronics and RFID



# CAEN Network's Companies



# Key Strengths

- Deep knowledge of market and customer issues
- **R&D Division** at the forefront of technology
- Capable of providing **custom solutions**
- Excellent pre- and post-sales support
- **Flexibility** and capability of facing new markets and new products (Spin-offs)



**CAEN**  
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## Electronic Instrumentation

- For 30 years CAEN has been providing Scientists and Engineers with the most advanced electronic instrumentation for any particle or radiation detectors
- Strong of an extremely close collaboration with the world major research laboratories CAEN is proud to produce the best tools for:
  - High Energy Physics
  - Neutrino Physics
  - Astrophysics
  - Dark Matter Investigation
  - Nuclear Physics
  - Educational
  - Medical Applications
  - Homeland Security
  - Industrial Applications
  - and more ...



# Products

- Power Supply
  - High Voltage and Low Voltage Systems
  - Multichannel NIM and VME HV Modules
- Signal Conditioning & Read-out Electronics
  - Preamplifiers
  - NIM, CAMAC and VME Front-End/Data Acquisition Modules
- Powered Crates
  - Low Ripple Linear NIM powered Crates
  - New Hi-End VME64/VME64x Crates
- Custom Developments
- Educational Tools



# Products

- CAEN catalog includes more than 250 products



- 40% of CAEN SpA production is Custom designed and does not appear in the catalog.



# CAEN Silicon PhotoMultiplier Educational/Evaluation Kits



Set-up for SiPM testing & characterization



- **DT5720A - Desktop Digitizer:**  
*2 Channels, 12 bit, 250 MS/s*  
*Digital Pulse Processing for Charge Integration (DPP-CI)*
- **SP5600 - 2 Ch General Purpose Amplifier & Power Supply Unit:**  
*Variable amplification gain up to 50 dB*  
*Wideband Amplifier*  
*Fast leading edge discriminator and time coincidence*  
*Provides sensor bias (120 V max.) with gain stabilization*  
*USB 2.0 interface*
- **SP5601 - Ultra-fast LED driver:**  
*Width of pulse:  $3 \div 60$  ns*  
*LED color: violet (400nm), 1500 mcd*  
*Internal/external pulse generator*  
*FC optical output connectors*
- **SP5602 - Scintillating Tile:**  
*(100 x 100 x 10 mm<sup>3</sup>)*  
*Scintillator: polystyrene*  
*WLS fiber embedded*
- **SP5603 - Mini Spectrometer:**  
*Mechanical structure for optimal SiPM to crystal coupling*  
*Crystal dimensions: 3 x 3 x 15 mm<sup>3</sup>*  
  
*Included crystals: LYSO, BGO, CsI*