



MEG by CTF

The best low-noise and stable
MEG available in the world



Our Number

+1-604-540-6044



Our Social

@ctfmeg



Our Website

ctf.com





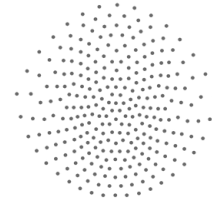
Superior accuracy, consistent results



"Set and Forget"



Best Signal to Noise



275 Sensor Locations

The CTF Advantage

The quality of a MEG system is principally defined by its ability to detect signals and reject noise. The CTF MEG employs a unique configuration of constructing higher order gradiometers which are extremely effective at rejecting environmental noise

In both optimal and challenging magnetic environments, the low-noise and stable performance of the CTF MEG is unsurpassed.

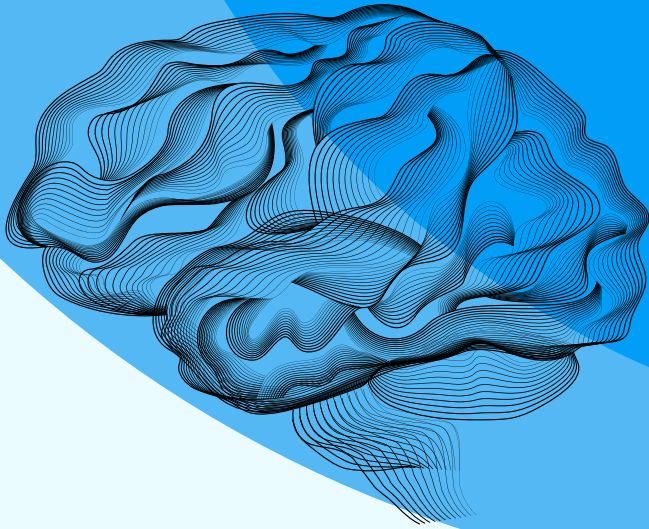
With the tried and tested 275 axial gradiometers, and full-rank noise cancellation, the CTF MEG is the MEG that you know and love.

Updated with the latest advancements in digital signal processing. Still the best-in-class sensor architecture the CTF MEG continues to push forward the field of magnetoencephalography

Specification Highlights

MEG Channels	304 (275 Sensing, 29 Reference)
Dynamic Range	32 bits +/- 600 nT
System Noise	4-7 fT-rms/Hz from 1-70Hz
Sample Rate	19.2 kHz





The Dynamic Brain

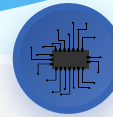
Under the Same Management Since 2007

About Us



Patient Support

From supine to seated, our new patient support affords a smoother patient experience



Electronics

Robust digital signal pro



Helium Recovery

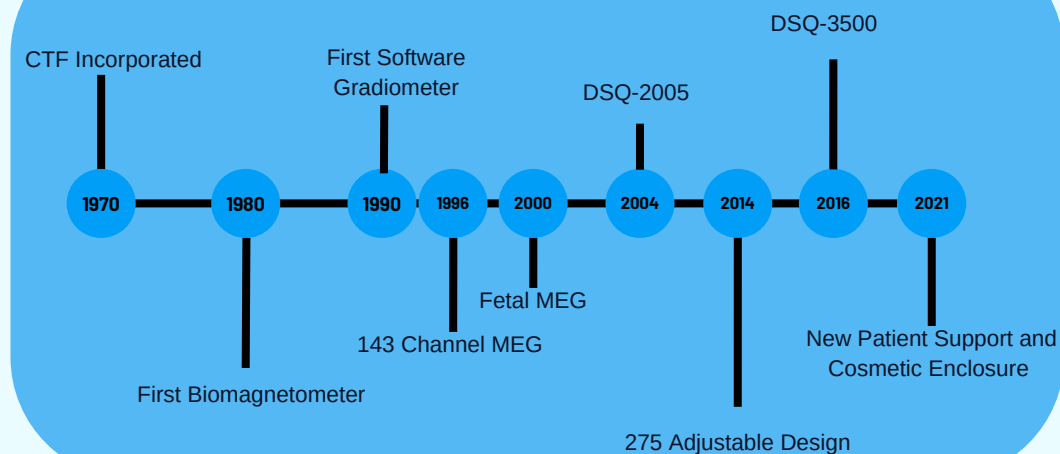
Both closed and open loop systems are supported



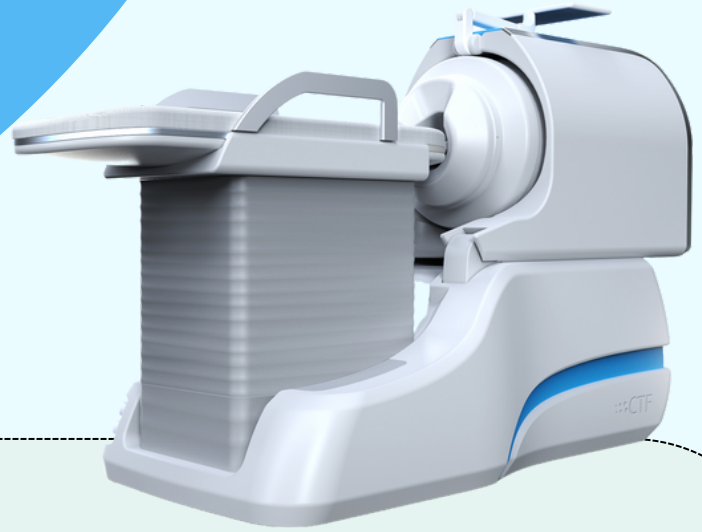
Reference Array

Our reference array is calibrated in the factory each system to ensure superior signal to noise ratio

Timeline of CTF



MEG Explainer



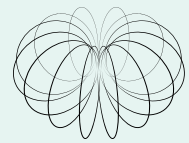
Neurons to Magnetic Fields

Electric currents create magnetic fields. Neurons generate electric currents, thus neural activity can be measured by magnetic fields.



Neurons

There are multiple types of neurons in the brain and all 86 billion generate an electrical current



Magnetic Fields

All electrical currents create a magnetic field that is proportional to the strength of the current. As such, neurons create magnetic fields



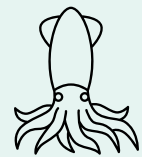
SQUIDS to Brain Maps

Super Conducting Quantum Interference Devices (SQUIDS) measure magnetic fields. By having these coupled to gradiometers we are able to construct brain activity in across the scalp. And source localize using source modelling



ϕ Josephson junction

These junctions make quantum mechanics observable via an electrical current



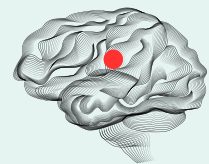
SQUIDS

DC SQUIDS Used in MEG contain two Josephson junctions to measure magnetic flux



Axial Gradiometers

Gradiometers are the points where the magnetic field is observed



Source Localisation

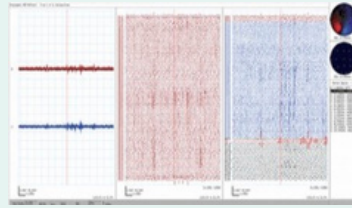
By having gradiometers in a large array you can use models to plot where in the brain activity is coming from

Software & Peripherals



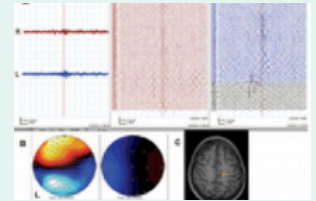
Software Suite

From our acquisition software Acq and our data viewer and editor Data Editor, to our command line interfaces for repeatable robust analytic pipelines CTF Software Suite has many of your needs for analysis. When you need to go beyond them CTF can be imported into most 3rd party software tools



Acq

With the capability to run different protocols and to do online processing you will see the quality of your data in a clean and clear graph



Data Editor

All electrical currents create a magnetic field that is proportional to the strength of the current. As such, neurons create magnetic fields



Pneumatic Somatosensory Stimulator



EEG Upto 128 Channels





Your Turnkey Solution

From Site Design to Your First Collection



In Depth Site Survey

We'll help you pick the best site for your MEG to ensure the cleanest data and the most ergonomic location



On Site Training

A variety of options to get you ready to collect your first dataset we have a growing team of application specialists

Service Excellence

Global Technical Support Staff
Preventative Maintenance
24/7 Phone Support
1 Business Day Turnaround



CTF Network

With some of the biggest names in MEG clinical and research throughout we will be your connector to that network



Full Stimulus Suite

Visual
Auditory
Somatosensory
and more..

Talk to Sales



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