

FAQ

2021

FREQUENTLY ASKED QUESTIONS



Q: What is TEMPEST?

A: TEMPEST is the study of and the mitigation of electromagnetic frequencies as they pertain to IT systems including Fat Clients/PCs, Thin clients, Monitors, MFPs, IP phones, and more through the use of physical shielding and filtering.

Q: How is Non-TEMPEST a vulnerability?

A: It has been found that signals emanating from IT systems can be intercepted and recovered out of the air from as far away as three football fields from a particular device and location. This creates a vulnerability in terms of conducting sensitive and classified data processing.

Q: How does one develop a TEMPEST product?

A: To get a product to meet the TEMPEST specification (provided by NSA) involves many steps. There are physical components that are utilized including special filters, gaskets, and copper mesh screens which attenuate the signals and keep them contained within the system. Often times a commercial off the shelf (COTS) product will be selected as a candidate for TEMPEST product development (such as an HP t640 thin client). API will then redesign this product so that it meets the TEMPEST specification while still retaining its commercial functionality. Once the design process and prototype build are completed the product will be put into a TEMPEST testing chamber for testing where we confirm that the product does indeed meet the TEMPEST spec. The time frame from initial design of a TEMPEST product to finishing a formal TEMPEST test can be anywhere between 6 to 12 months or more depending on the complexity of the product. After a product passes the API testing, we are required to submit a test plan and test report to the NSA Tempest Certifying Authority.

Q: How does a TEMPEST product become “approved” for use and purchase?

A: TEMPEST products must be on the agency’s Approved Equipment List (AEL) in order to be purchased by agency personnel. Once a TEMPEST test is finished, API

constructs a test report which is delivered to the DOS/DS/CTTA office for formal review. After the test report is delivered to the DOS/DS/CTTA, the product is sent to the Technical Security and Safeguards Division (TSS) of IRM for audit testing to verify the results in our test report. Upon completion of the testing by TSS, they send their own test report to the DOS/DS/CTTA. Assuming that there are no discrepancies, the product will then be placed on the AEL and it is available for purchase by API customers. Below is a basic flow chart showing how this process works:

API TEMPEST TEST CONDUCTED → API TEST REPORT SENT TO DOS/DS/CTTA → PRODUCT SENT TO TSS FOR TESTING → TSS TEST REPORT SENT TO DOS/DS/CTTA → DOS/DS/CTTA REVIEWS TSS REPORT → PRODUCT IS THEN PLACED ON THE AEL

Q: Once the TEMPEST product is approved, how can I purchase it?

A: There are several ways to purchase TEMPEST equipment. The GSA Advantage website lists the majority of API products in a number of standard configurations.

API products can also be acquired through NASA SEWP, a US government wide acquisition contract utilized by DOD and authorized government contractors.

Q: How can I find out if an API product that I have is more than 4 ½ years old and no longer under warranty?

A: Please contact Brian Perry (bperry@advprograms.com) or Wally Reeves (wreeves@advprograms.com) for information regarding the date of manufacture and warranty support of a specific product. Please remember to REMOVE your location from your e-mail signature block or other areas where your location can be noted if you are at a foreign post. Please supply both the model number and serial number of the product in question so that we can accurately determine the date of manufacture.

your **information**
assurance partner

API FREQUENTLY ASKED QUESTIONS

Q: I heard that TEMPEST products “expire” after 5 years. Is this true?

A: While the product may still work functionally after 5 years, the DOS/DS/CTTA Office has expressed concern that they can only guarantee the TEMPEST integrity of any product for 5 years from date of manufacture. After 5 years, it is recommended that you remove the device from the network and order a replacement unit to ensure that it is properly TEMPEST protected

Q: Are there any documented TEMPEST attacks that have taken place in the recent past?

A: None that have been reported. However, this is a VERY slippery slope. The fact is that no intelligence agency would ever admit to a TEMPEST attack – and certainly not in unclassified environments. Minus the use of TEMPEST equipment, is there a risk out there that can be exploited? Absolutely – or Diplomatic Security (DS) would not continue to mandate the use of this equipment.

Q: What is the 3 foot distance rule between ClassNet and OpenNet systems? Why can't I use longer cables to hook up my ClassNet computer to my OpenNet computer?

A: Details regarding this issue are classified and should be addressed to the DOS/DS/CTTA Office over ClassNet. Similarly, the maximum cable length is dictated by this office.

Q: Why is TEMPEST equipment so expensive?

A: As was mentioned earlier in this document, from design inception to the time of product availability we can be talking anywhere between six months to one year - or more,

depending on the complexity of the product being developed. Internal costs associated with these efforts have historically been between \$100,000 and \$250,000 per product. We incur these costs whether we sell one unit or thousands of units. On top of this, the manufacturing process involving TEMPEST equipment is, for all intents and purposes, a manual one. Indeed, it is the antithesis of any truly automated robotic manufacturing environment. Beyond these factors, the additional components required to get any product to meet the TEMPEST specification are unto themselves very expensive. This is one of the reasons that all TEMPEST products are “built to order” and not on our warehouse shelves waiting to be bought. All of these factors contribute to the overall price of TEMPEST equipment. We invite you to our Salem, NH TEMPEST R&D/Manufacturing facility for a tour and to see first-hand all of what has been described.

Q: Who do I contact if I need a quote for a TEMPEST product?

A: Your primary points of contact for all sales inquiries are Robin Walters, National Account Manager, Wally Reeves, Manager of Technical Sales Support, and Lana Von Blon, Sales Coordinator. Robin can be reached at rwalters@advprograms.com or on his cell at (703) 395-8271. Wally can be reached at wreeves@advprograms.com or at his direct line on API's corporate office in Columbia, MD at (410) 312-5816. Lana can be reached at lvonblon@advprograms.com or on her direct office line (410) 312-5823.