



2020

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 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 t630 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. Once these steps are conducted internally at API, the product must then be submitted to the State Department for approval.

Q: How does a TEMPEST product become "approved" for use and purchase at the State Department?

A: TEMPEST products must be on the State Department's Approved Equipment List (AEL) in order to be purchased by State Department personnel. Once a TEMPEST test is finished, API constructs a test report which is delivered to the DS/CTTA office for formal review. After the test report is delivered to the 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 DS/CTTA. Assuming that there are no discrepancies, the product will then be placed on the AEL and it is available for purchase by State Department customers. After listing on the AEL, API will work with the sponsoring bureau to get the product listed on the ITCCB. Below is a basic flow chart showing how this process works:

API TEMPEST TEST CONDUCTED → API TEST REPORT SENT TO DS/CTTA→PRODUCT SENT TO TSS FOR TESTING→TSS TEST REPORT SENT TO DS/CTTA →DS/CTTA REVIEWS TSS REPORT→PRODUCT IS THEN PLACED ON THE AEL→SPONSORING BUREAU SUBMITS PAPERWORK FOR ITCCB APPROVAL

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

A: There are two common ways to purchase TEMPEST equipment. The first method is through Secure ILMS via Gary Clark's branch within AQM. Gary and his organization use the AEL as their "bible" and will generally not place an order for any equipment that is not listed on the AEL.

The second way to purchase TEMPEST products is through the Secure - Expedited Logistics Program commonly referred to as S-ELP. S-ELP was formerly known as the A/LM Stocking Program. They offer many TEMPEST products for purchase including thin clients, TEMPEST/TSG 8841 Red Phones, printers, multi-function printers, and many more.

One other issue to be considered is the products that are required. There are certain products that are NOT listed on the S-ELP catalog. These include TEMPEST servers, TEMPEST versions of Cisco Switches and Secure VTCs. If you need to order one of these devices, you must place your orders through Secure ILMS.



API FREQUENTLY ASKED QUESTIONS

Q: What kind of product support is offered after the purchase of an API product?

A: API offers a 4 ½ year warranty from the time of shipment (from API facilities) on all GITM supported products. These include PCs/Fat Clients, Thin Clients, Color and Black & White Printers, Servers and Cisco Switches. For non-GITM supported products API offers a 1 year warranty on workmanship, functionality, and quality. An optional extended warranty can also be purchased (prior to product shipment) for all non-GITM supported products. Please contact Wally Reeves (wreeves@advprograms.com; direct line 410-312-5816) for more information on extended warranties.

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 Phil Davis (pdavis@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.

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 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 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 Tanya Miller, Account Manager, Wally Reeves, Manager of Technical Sales Support, and Lana Von Blon, Sales Coordinator. Tanya can be reached at tmiller@advprograms.com or (410) 312-5858. 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 Ivonblon@advprograms.com or on her direct office line (410) 312-5823.

