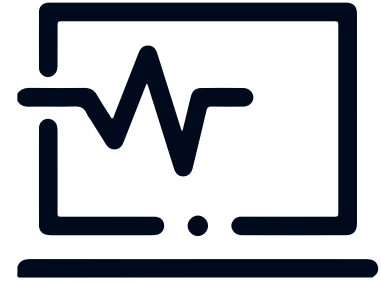# tangent

WHY MEDICAL GRADE?
EMI Reduction

The most compelling factor in choosing a Medical Grade computer is reducing EMI. **Tangent Medical Grade computers are UL60601-Certified.** Certification ensures EMI compliance.

The Food and Drug Administration **(FDA)**, Center for Devices and Radiological Health **(CDRH)** and Association for the Advancement of Medical Instrumentation **(AAMI)** have established **recommendations to minimize** the risks associated with **medical device EMI** and promote electromagnetic compatibility (EMC) in healthcare facilities. **Medical computers are medical devices.**

The clinical and biomedical engineers and Safety Committee within a healthcare facility should ensure that all medical devices purchased reduce EMI.

FDA **U.S. FOOD & DRUG**
ADMINISTRATION

FDA/CDRH RECOMMENDATIONS FOR
EMC/EMI IN HEALTHCARE FACILITIES[1]

Manage
the electromagnetic environment, RF transmitters and all electrical and electronic equipment, including **medical devices, to reduce the risk of medical device EMI** and achieve EMC

Coordinate the purchase,
installation, service, and management of all electrical and **electronic equipment** used in the facility to achieve EMC

Educate
healthcare facility staff, contractors, visitors, and patients about EMC and EMI and how they can recognize medical device EMI and help **minimize EMI risks**

Establish and implement written policies and procedures
that document the intentions and methods of the healthcare institution for **reducing the risk of medical device EMI** and achieving EMC

[1]*FDA and Center for Devices and Radiological Health, "CDRH Recommendations for EMC/EMI in Healthcare Facilities", https://www.fda.gov/radiation-emitting-products/electromagnetic-compatibility-emc/fdacdrh-recommendations-emcemi-healthcare-facilities, May 24, 2023.*

GUIDANCE ON ELECTROMAGNETIC COMPATIBILITY OF MEDICAL DEVICES FOR CLINICAL/BIOMEDICAL ENGINEERS[2]

AAMI TIR 18 Summary Recommendations

Because of their responsibility for the safe functioning of patient care equipment, **clinical/biomedical engineers should be the focal point for EMC, EMI mitigation, and EMC/EMI education/training** within the health care organization.

Electrically-powered medical devices purchased for use in the facility should meet EMC standards.

EMC/EMI should become a permanent responsibility of the health care organization's Safety Committee.

Purchase, installation, service, and management of **all equipment (medical, communications, building systems, and information technology)** used in the facility **should be coordinated to assure EMC.** Clinical/biomedical engineering, facility management, information systems, materials management, and risk management personnel should all be aware of the possibility for equipment interactions and the need for coordination.

[2] *Guidance on Electromagnetic Compatibility of Medical Devices for Clinical/Biomedical Engineers. AAMI TIR 18-1997. Arlington, Virginia: Association for the Advancement of Medical Instrumentation; 1997.*