Tesla has officially released its new Child Left Alone Detection feature as part of software update 2025.14.12, aiming to help prevent child heatstroke incidents in parked vehicles. The system uses Cabin Radar, a 4D imaging sensor capable of detecting subtle movements like breathing, even through car seats. If a child is detected alone inside the [...] Apple quietly explored building its own satellite internet service as far back as 2015, working with Boeing on a plan to deliver full wireless internet—not just emergency access—to iPhones and homes, according to people familiar with the matter, reports The Information. The internal effort, known as Project Eagle, would have involved launching thousands of Boeing [...] Tesla is losing steam in Europe, as new car registrations across the EU dropped by 49% in April 2025 compared to the same month last year, according to data from the European Automobile Manufacturers' Association (ACEA). From January to April, Tesla registrations fell by nearly 39% year-over-year. Tesla's shrinking share is a stark contrast to [...] SpaceX is targeting Tuesday, May 27 for the ninth flight test of Starship, with liftoff expected as early as 6:30 p.m. CT. A live webcast will begin about 30 minutes before launch on SpaceX.com, X (@SpaceX), and the X TV app. This flight marks a major milestone: the first reuse of a Super Heavy booster, [...] Elon Musk says he's going back to his old routine of sleeping at work and spending nearly all his time on his companies. In a post on May 24, Musk said he'll be "super focused" on X, his AI startup xAI, and Tesla, especially with major tech rollouts underway. This was in response to someone's [...] Tesla just got one of the most bullish outlooks on Wall Street, yet again. On Friday, Wedbush analyst Dan Ives raised his price target for Tesla from $350 to $500, calling the company "the most undervalued AI play in the market today." This is now a shift from the recent outlook from Ives. Ives believes [...] Tesla is offering a new way for owners to experience its latest vehicles with a special 48-hour extended test drive, according to a message sent through the Tesla app, according to Canadian readers of Tesla North. Labeled the "Value Experience – Tesla Extended Demo Drive," the promotion is a thank-you to current Tesla owners. Eligible [...] Tesla has released a new video showing its Optimus humanoid robot completing everyday household tasks entirely on its own — no remote control required. In the video, Optimus is seen taking out the trash, sweeping with a dustpan, vacuuming, opening a cabinet, tearing off a paper towel, stirring a pot, and even closing curtains. In [...] Tesla has released a new video showing its Optimus humanoid robot completing everyday household tasks entirely on its own — no remote control required. In the video, Optimus is seen taking out the trash, sweeping with a dustpan, vacuuming, opening a cabinet, tearing off a paper towel, stirring a pot, and even closing curtains. In [...] Tesla's long-awaited robotaxi service is set to launch next month, starting in Austin, Texas. According to CEO Elon Musk in an interview with CNBC (the CEO's second interview of the day) the company is taking a careful approach to ensure safety, beginning with just 10 autonomous vehicles before expanding to over 1,000 in the following [...] Elon Musk joined the Qatar Economic Forum virtually on May 20, 2025, in an intense and wide-ranging interview that touched on everything from Tesla's leadership to political controversies. He was interviewed by Bloomberg's Mishal Husain, with the reporter asking antagonizing and rapid-fire "gotcha" questions to Musk, with gaslighting as well. Speaking remotely from Giga Texas [...] Apple quietly explored building its own satellite internet service as far back as 2015, working with Boeing on a plan to deliver full wireless internet—not just emergency access—to iPhones and homes, according to people familiar with the matter, reports The Information. The internal effort, known as Project Eagle, would have involved launching thousands of Boeing [...] SpaceX is targeting Tuesday, May 27 for the ninth flight test of Starship, with liftoff expected as early as 6:30 p.m. CT. A live webcast will begin about 30 minutes before launch on SpaceX.com, X (@SpaceX), and the X TV app. This flight marks a major milestone: the first reuse of a Super Heavy booster, [...] SpaceX's Starlink Mini is back on sale in Canada for $399, down from its regular $599 price. The offer runs until May 28 and brings back the same launch promo price from December 2024. Starlink Mini is a portable version of the company's satellite internet kit, small enough to fit in a backpack. It includes [...] Emirates is reportedly in talks with Elon Musk's SpaceX to upgrade the airline's internet service, according to people familiar with the situation, according to Bloomberg. The Dubai-based airline, known for its large international fleet and luxury service, is considering using Starlink internet on its widebody jets. Sources say no final deal has been made yet. [...] SpaceX has launched a new low-cost accessory called the Starlink Router Mini, aimed at improving Wi-Fi coverage in smaller homes or areas with dead zones. Priced at $40 USD, the router is currently only available in the United States through the official Starlink Shop. Designed to extend or supplement your existing Starlink setup, the Router [...] SpaceX's Starlink Mini is back on sale in Canada for $399, down from its regular $599 price. The offer runs until May 28 and brings back the same launch promo price from December 2024. Starlink Mini is a portable version of the company's satellite internet kit, small enough to fit in a backpack. There's a Starlink ad on X advertising the $0 kit offer. You need to punch in your address to see if you're eligible. So far, nations included in [...] SpaceX's Starlink Mini is back on sale in Canada for $399, down from its regular $599 price. The offer runs until May 28 and brings back the same launch promo price from December 2024. Starlink Mini is a portable version of the company's satellite internet kit, small enough to fit in a backpack. It includes [...] The real and actual Black Friday is here, despite some retailers having previously launched sales earlier this month. Here's a quick roundup of some of the best Tesla Black Friday deals for 2024... TESBROS: Up to 30% off site-wide Tesla Model 3 Accessories on Amazon Tesla Model Y Accessories on Amazon Tesla Model S Accessories [...] Tesloid, which makes accessories for Tesla vehicles, has launched its Black Friday sale, offering an enticing 25% off discount site-wide. Customers can jump on this discount by using the coupon code TS25 at checkout. Additionally, Tesloid is providing exclusive deals on winter tires. On Tesloid.ca, customers can use the coupon code TIRE150 to receive a [...] The first thing after placing your order for a new Model Y is to buy some mats to protect your new baby, ahead of your delivery date. Tesloid has a range of custom-designed mat sets for the Tesla Model Y. These mats are tailored to fit different variants, offering both style and enhanced protection [...] Online retailer Tesloid has specialized winter tire packages for Tesla Model 3 and Model Y vehicles to improve safety and performance during winter. For the Model Y, the package is priced at $3,149.99 CAD or $2,349.99 USD. It includes four Michelin X-Ice Snow Tires on 19-inch Gemini OEM rims and includes four Tire Pressure Monitoring [...] Tesloid is offering specialized winter tire packages for Tesla Model 3 and Model Y vehicles, aimed at enhancing driving safety and performance in winter conditions. For Tesla Model Y owners, the package is priced at $3,149.99 CAD or $2,349.99 USD. It includes four Michelin X-Ice Snow Tires mounted on 19-inch Gemini OEM rims, along with [...] A biography of Tesla and SpaceX CEO Elon Musk, penned by renowned author Walter Isaacson, is currently on sale for 30% off its list price on Amazon. Originally priced at $35.00 USD, the hardcover edition is now available for $24.48, allowing buyers to save $10.52. The biography, released on September 12, 2023, has garnered a [...] Rivian is growing its manufacturing site in Normal, Illinois, to prepare for production of its new R2 electric SUV, which is expected to launch in 2026. The company is adding a 1.1 million square-foot facility, which already produces the R1 series and electric delivery vans. Once the expansion [...] Tesla has announced a "conditional" settlement in its lawsuit against Rivian, which began in 2020. The case accused Rivian of hiring former Tesla employees to steal trade secrets about electric vehicle technology. The settlement terms haven't been shared publicly, but Tesla told a California judge it plans to dismiss the case by December 24 if [...] Rivian is celebrating Halloween in style with a new software update that introduces Car Costumes for its electric vehicles, letting drivers transform their R1 models with themes inspired by iconic entertainment vehicles. The update rolls out on October 18 and offers a fun, immersive experience right from the Rivian app. The Car Costumes include Knight [...] Rivian's shares took a nearly 9% hit on Friday after the company cut its 2024 production targets, leaving analysts questioning the severity of yet another supply chain issue. Shares were up 0.48% on Monday. It turns out that a miscommunication earlier this year with its supplier, Essex Furukawa, caused Rivian to lose access to a [...] Rivian has unveiled a new "Privacy Hub" to provide customers with a centralized location for information on the company's data practices and privacy rights. The announcement, shared through an email to customers obtained by Tesla North, highlights recent updates and upcoming changes to Rivian's Data Privacy Notice, which will take effect on November 1, 2024. [...] Rivian has introduced a new rewards program for U.S.-based owners, offering incentives for referring new buyers to the electric vehicle brand. Each Rivian owner receives a personalized referral code found in their account and Rivian app profile. When a new customer uses this code during checkout and takes delivery of a qualifying vehicle from the [...] Ford has completed the shipment of 139,935 complimentary Fast Charging Adapters to its U.S. electric vehicle customers, fulfilling its commitment to unlock broader access to Tesla's Supercharger network. The initiative, launched in 2024, aimed to simplify charging for Ford EV owners. Each adapter shipped came with a message: "Our Gift, Just For You," and a [...] Ford electric vehicle (EV) owners can now enjoy a smoother charging experience thanks to a new feature update. Starting today, drivers of the Mustang Mach-E and F-150 Lightning can be automatically routed to Tesla's North American Charging Standard (NACS) fast charging stations, using compatible Tesla Superchargers, during their trip planning. [...] Ford is hitting the brakes on its F-150 Lightning production, pausing assembly of its flagship electric truck at the Dearborn, Michigan, plant from mid-November to early January. The reason? Ford says demand for electric vehicles, or EVs, isn't keeping up with expectations. The production halt will start after the shift on November 15 and resume [...] Ford announced a delay in the production of its next-generation all-electric pickup truck at a new Tennessee plant and canceled plans for a three-row electric SUV. The company will instead focus on hybrid models and electric commercial vehicles, including a new electric van in 2026 and two electric pickups in 2027. One pickup will be [...] Ford has announced that its BlueCruise hands-free highway driving technology is now available in 15 European countries following approval by the European Commission. BlueCruise is available to 17, including the U.S. and Canada. Austria Belgium Czech Republic Denmark France Great Britain Germany Greece Hungary Italy Netherlands [...] Ford's electric vehicle (EV) business recorded a significant loss of $1.1 billion in the second quarter of 2024. Despite generating $1.1 billion in revenue, the EV unit faced a loss margin of -99.5%. This downturn was compounded by a 23% decrease in vehicle volume compared to the previous year. Key factors contributing to the losses [...] The National Highway Traffic Safety Administration (NHTSA) has announced a consent order with Cruise, the autonomous driving company majority-owned by General Motors, over incomplete crash reports. The order addresses Cruise's failure to disclose full details of a crash on October 2, 2023, when a driverless Cruise vehicle dragged a pedestrian approximately 20 feet before stopping. [...] General Motors (GM) announced that its electric vehicle (EV) customers will now have access to over 17,800 Tesla Superchargers across North America using a GM-approved NACS DC adapter. This expands the charging options available to GM EV drivers, who will now have access to more than 231,800 public Level 2 and DC fast chargers in [...] General Motors (GM) is reducing its forecasted sales and production of all-electric vehicles (EVs) for this year, citing slower-than-anticipated U.S. adoption of EVs. GM Chief Financial Officer Paul Jacobson announced the company now anticipates producing 200,000 to 250,000 EVs in 2024, down from the previously stated range of 200,000 to 300,000. Despite this adjustment, Jacobson [...] Tesla's recent decision to lay off its entire Supercharger team has led to delays in the timeline for connecting more non-Tesla brands to its charging network. Initially, Tesla's website stated that Volvo, GM, and Polestar drivers would gain access to 15,000 eligible stations by spring 2024. However, Polestar has indicated that the timeline has shifted. [...] General Motors is actively seeking to recruit software interns impacted by Tesla's recent downsizing. Laura del Amo, a talent sourcing strategist for GM, made a public appeal on LinkedIn targeting software students affected by Tesla's decision to terminate its summer internship program. This move comes as Tesla recently announced a reduction of more than 10% [...] General Motors has initiated legal action against the city of San Francisco, contesting a $108 million tax levy imposed over a span of seven years. The automotive giant claims the city unjustly linked the tax to a portion of its global revenue due to the presence of its Cruise self-driving unit, despite GM's minimal operational [...] Cruise, General Motors' troubled self-driving car subsidiary, announced it is laying off approximately 900 employees, equating to 24% of its workforce. This decision is part of the company's strategy to reduce costs and restructure operations following an incident on October 2, which involved a pedestrian being struck and dragged by one of its autonomous vehicles. [...] Kyle Vogt, the co-founder of Cruise who led the company from a startup to its acquisition by General Motors (GM), has resigned from his CEO position. This development was revealed in an email Vogt sent to employees, as reported by TechCrunch, which obtained a copy of the email. Following Vogt's departure, GM Chair and CEO [...] According to PCMag, SpaceX has filed a formal appeal against the U.S. Federal Communications Commission (FCC)'s decision to rescind $886 million USD in federal funding for its high-speed satellite broadband service, Starlink. The FCC awarded SpaceX $886 million under its Rural Digital Opportunity Fund (RDOF) back in 2020 to deliver high-speed Starlink internet to rural and underserved areas across 35 states. However, the Commission rejected the funding last month after reviewing SpaceX's long-form application. "The decision should not be allowed to stand, leaving the people in these rural areas across our country behind yet again," SpaceX said in its filing. As for why SpaceX's funding was overturned, the FCC cited Starlink's high cost to consumers and wasn't confident that the service could deliver fast enough speeds. Starlink currently costs $110 per month in the U.S., along with a one-time $599 fee for the accompanying hardware. The service has, however, seen significant price cuts in other parts of the world in recent weeks. Under the RDOF program, the FCC is looking to supply gigabit internet speeds to more than 85% of the covered rural regions and download speeds of at least 100 Mbps to all 99.7% of the selected areas in the coming years. The Commission said Starlink is a "nascent LEO (low-Earth orbiting) satellite system" that is not capable of delivering its spread that the FCC has a "clear bias towards fiber" over using satellites to deliver high-speed broadband, despite Starlink's history of success and speedy deployment. Furthermore, SpaceX claimed the Commission used third-party data from Ookla, the internet analytics company behind popular web tool Speedtest.net, "to cast doubt on Starlink's ability to deliver 100/20Mbps speeds starting in 2025." Back in June, Ookla reported that Starlink speeds went up by 38% in the U.S. and 58% in Canada over the past year. SpaceX, meanwhile, claimed it submitted internal data to the FCC that demonstrated Starlink would be able to achieve the RDOF program's speed goals by 2025. This data included publicly-redacted details on SpaceX's financial revenues from Starlink and how much capacity the satellite internet system needs to deliver high-speed broadband. "The Bureau's endorsement of Ookla's data over SpaceX's detailed submissions is unexplained, unjustified, and fails on its own terms," the company wrote in its filing, later adding: "The Bureau's decision holds SpaceX to standards not adopted by the Commission for the RDOF program. Indeed, these are standards that no bidder could meet today." SpaceX went on to clarify that the cost for Starlink would have been lower for subscribers covered by the RDOF program. "The suggestion that Starlink pricing justified the Bureau's decision likewise makes no sense. SpaceX never claimed it would use its current pricing in the RDOF territories (indeed by law it cannot)," the company said. SpaceX also questioned the FCC's decision to withdraw the funding even though there were no other bidders for more than half of the areas the company won. "Finally, in most areas won by SpaceX, it appears no fiber or 1Gbps provider even submitted a bid," SpaceX argued. "Of the 19,233 census block groups awarded to SpaceX, 11,024 (57.3%) did not receive a single Gigabit tier bid." In the ever-evolving landscape of technological innovation, where wireless devices and electronic marvels reign supreme, a guardian stands steadfast, ensuring that our modern marvels harmoniously coexist without disrupting the frequencies of progress. This guardian is none other than the Federal Communications Commission (FCC), and its certification process serves as a lighthouse guiding innovators through the tumultuous seas of regulatory compliance. Join us as we embark on a journey to demystify the intricate realms of FCC certification, uncovering its significance, application procedures, and the products it envelopes in its protective embrace. FCC certification refers to the approval process conducted by the Federal Communications Commission (FCC), which is a regulatory agency in the United States responsible for overseeing various forms of communication, including radio frequency (RF) devices, telecommunications, broadcasting, and more. FCC certification is required for electronic devices that emit radio frequency radiation or wireless signals, such as Wi-Fi routers, cell phones, Bluetooth devices, wireless headphones, and other similar products. The purpose of FCC certification is to ensure that electronic devices comply with certain technical standards and regulations set by the FCC to prevent interference with other wireless devices and to ensure that the devices are safe for use. The FCC certification process involves testing and evaluating the electromagnetic interference (EMI) and radio frequency interference (RFI) characteristics of the device to ensure that it operates within the allowable limits and does not disrupt other devices or networks. Manufacturers or importers of devices subject to FCC regulations must submit their products for testing to an FCC-approved testing laboratory. Once a device passes the required tests and meets the FCC's standards, the manufacturer can then obtain an FCC certification, which usually involves placing the FCC logo or label on the product packaging to indicate compliance. This development was unveiled in an email Vogt sent to employees, as reported by TechCrunch, which obtained a copy of the email. Following Vogt's departure, GM Chair and CEO [...] According to PCMag, SpaceX has filed a formal appeal against the U.S. Federal Communications Commission (FCC)'s decision to rescind $886 million USD in federal funding for its high-speed satellite broadband service, Starlink. The FCC awarded SpaceX $886 million under its Rural Digital Opportunity Fund (RDOF) back in 2020 to deliver high-speed Starlink internet to rural and underserved areas across 35 states. However, the Commission rejected the funding last month after reviewing SpaceX's long-form application. "The decision should not be allowed to stand, leaving the people in these rural areas across our country behind yet again," SpaceX said in its filing. As for why SpaceX's funding was overturned, the FCC cited Starlink's high cost to consumers and wasn't confident that the service could deliver fast enough speeds. Starlink currently costs $110 per month in the U.S., along with a one-time $599 fee for the accompanying hardware. The service has, however, seen significant price cuts in other parts of the world in recent weeks. Under the RDOF program, the FCC is looking to supply gigabit internet speeds to more than 85% of the covered rural regions and download speeds of at least 100 Mbps to all 99.7% of the selected areas in the coming years. The FCC certification process involves testing and evaluating the electromagnetic interference (EMI) and radio frequency interference (RFI) characteristics of the device to ensure that it operates within the allowable limits and does not disrupt other devices or networks. Manufacturers or importers of devices subject to FCC regulations must submit their products for testing to an FCC-approved testing laboratory. Once a device passes the required tests and meets the FCC's standards, the manufacturer can then obtain an FCC certification, which usually involves placing the FCC logo or label on the product packaging to indicate compliance. This certification is necessary before the device can be legally sold and used in the United States. FCC certification helps ensure that wireless devices and electronic products can coexist and use, operate effectively, and do not cause harmful interference to other devices or communication networks. FCC (Federal Communications Commission) certification is required when a device incorporates radiofrequency (RF) technology and is intended to be sold or used in the United States. The FCC regulates communication devices to ensure that they operate within certain technical parameters to prevent interference with other electronic devices and communication systems. Here are some instances when FCC certification is typically required: 1. Wireless Communication Devices: Any device that uses wireless communication technology, such as Wi-Fi, Bluetooth, cellular, or other RF transmission methods, requires FCC certification. This includes products like smartphones, tablets, laptops, routers, and other wireless devices. 2. Radio Equipment: Devices that emit radio signals, like radios, walkie-talkies, and two-way radios, fall under this category. 3. Transmitters and Transceivers: If a device has the capability to both transmit and receive signals, such as a two-way radio or a satellite communication terminal, it likely needs FCC certification. 4. Unintentional Radiators: Devices that produce RF interference as a byproduct of their operation, like computers, power tools, and some household appliances, might need FCC certification to ensure they meet the regulatory emission limits. 5. Intentional Radiators: Devices designed to emit RF signals intentionally, like remote controls, RFID systems, and some medical devices, generally require FCC certification. 6. Telecommunication Equipment: Equipment used in telecommunication systems, including landline phones, fax machines, and VoIP devices, may require FCC certification. 7. Part 15 Devices: Some low-power devices operating within certain frequency ranges fall under FCC Part 15 regulations. These devices include wireless headphones, garage door openers, and some remote-controlled toys. It's important to note that the need for FCC certification depends on the specific device, its intended use, and the type of RF technology it incorporates. Manufacturers and importers are responsible for ensuring their devices comply with FCC regulations before they are marketed or used in the United States. Failure to obtain proper certification or non-compliance with FCC rules can lead to regulatory penalties and potential issues with device operation and interference with other systems. FCC certification is required for electronic products that emit radio frequency (RF) radiation or wireless signals, such as Wi-Fi routers, cell phones, Bluetooth devices, wireless headphones, and other similar products. Some common types of products that require FCC certification include: 1. Wireless Communication Devices: – Cell phones and smartphones – Cordless phones – Two-way radios – Walkie-talkies 2. Wireless Networking Equipment: – Wi-Fi routers and access points – Wireless range extenders – Wireless adapters 3. Remote Control Devices: – Remote controls for various electronic devices – Garage door openers 4. Radio Equipment: – AM/FM radios – Shortwave radios 5. Medical Devices: – Certain medical devices that use wireless communication, such as wireless heart rate monitors or wearable health devices 6. RFID Devices: – Radio frequency identification (RFID) devices used for tracking and identification purposes 7. Wireless Audio Devices: – Wireless headphones – Wireless speakers 8. Wireless Cameras and Surveillance Systems: – Wireless security cameras – Baby monitors with wireless capabilities 9. Automotive and Vehicle Equipment: – Tire pressure monitoring systems (TPMS) 10. Satellite Communication Equipment: – Satellite phones – Satellite communication terminals 11. Industrial and Scientific Equipment: – Scientific equipment that uses wireless communication – Industrial wireless sensors and monitoring devices It's important to note that the list above is not exhaustive, and the requirement for FCC certification can vary based on the specific features and capabilities of a device. If a device emits radio frequency radiation or uses wireless technology, it's advisable for manufacturers or importers to consult with the FCC or a qualified testing laboratory to determine whether FCC certification is necessary for their particular product. Obtaining FCC certification for your electronic device involves several steps to ensure that your product complies with the regulations set forth by the Federal Communications Commission. Here's a general overview of the process: 1. Determine Applicability: First, determine if your device requires FCC certification. If your device incorporates wireless communication technology or emits radiofrequency (RF) signals, it likely falls under FCC regulations. 2. Identify the Appropriate Rules: Identify the specific FCC rules that apply to your device. FCC rules are organized into different parts (e.g., Part 15, Part 22, Part 25) that cover various types of devices and services. Each rule part outlines the technical requirements, emission limits, and other compliance criteria. 3. Preparation and Testing: Design and manufacture your device to meet the technical requirements specified in the applicable FCC rule part. This may involve testing the device's RF emissions, susceptibility to interference, and other requirements. Testing is usually conducted in an accredited testing laboratory. 4. FCC ID Application: If your device requires FCC certification, you need to submit an application for an FCC ID. An FCC ID is a unique identifier assigned to your device after it has been certified. The application is filed through the FCC's online system called the FCC Equipment Registration and Certification System (Grantee Code application). 5. Test Reports and Documentation: As part of the FCC ID application, you'll need to provide test reports and documentation that demonstrate your device's compliance with the applicable FCC rules. This documentation typically includes test results, technical specifications, schematics, user manuals, and other relevant information. 6. Labeling: Once your device receives FCC certification and an FCC ID, you'll need to label the device with the FCC ID. This label should be visible on the device itself and in the user manual. The FCC label indicates that your device has undergone the necessary testing and is compliant with FCC regulations. 7. Declaration of Conformity (DoC): Some devices require a Declaration of Conformity, which is a document stating that your device complies with FCC rules. The DoC includes information about your product, its technical specifications, and the FCC ID. This document is typically made available to the public and regulatory authorities. 8. Post-Certification Responsibilities: After obtaining FCC certification, you are responsible for maintaining compliance throughout the production and distribution process. If there are any design changes to the device, you may need to retest and update the FCC documentation accordingly. 9. Market Access and Selling: With FCC certification and proper labeling, you can legally market and sell your device in the United States. The FCC ID label assures consumers and regulatory authorities that your device meets the required standards. The FCC certification process can be complex, and the requirements may vary based on the type of device and the specific FCC rules that apply. Many companies choose to work with experienced consultants or testing labs that specialize in FCC compliance to navigate the process successfully. Before starting the process, consult the FCC's official website and relevant rule parts for the most up-to-date information and guidelines. Applying for FCC certification involves a series of steps to ensure that your electronic product complies with the necessary regulations and standards set by the Federal Communications Commission (FCC). Here's a general outline of the process: 1. Determine Applicability: Determine whether your product requires FCC certification. If your product emits radio frequency (RF) radiation or uses wireless technology, it likely falls under FCC jurisdiction. Consult FCC regulations and guidelines to confirm. 2. Select an FCC-Approved Testing Laboratory: Choose a testing laboratory that is accredited by the FCC to perform the required testing for your product. These laboratories are authorized to conduct the necessary tests to ensure compliance with FCC regulations. 3. Preparation: Gather all relevant documentation and information about your product, including technical specifications, schematics, user manuals, and any other relevant details. This information will be needed for the certification process. 4. Testing and Evaluation: Submit your product to the chosen testing laboratory for evaluation. The laboratory will conduct tests to ensure that your product meets the FCC's technical standards, including radio frequency emissions, electromagnetic interference (EMI), and other relevant parameters. 5. Test Report and Documentation: The testing laboratory will provide you with a test report that summarizes the results of the testing process. This report is a crucial part of your FCC certification application. 6. Create an FCC Registration: Create an account on the FCC's online system, the Federal Communications Commission Registration System (CORES). This system will be used for the registration and identification of your company as the applicant. 7. File an FCC Application: Using the FCC's online Electronic Comment Filing System (ECFS), submit your application for FCC certification. Include the test report and any required documentation. 8. Pay Application Fees: Pay the necessary application fees associated with your certification. The fees vary depending on factors such as the type of product and the scope of testing required. 9. Wait for FCC Review: The FCC will review your application and the provided documentation. This review process can take some time, and the FCC may request additional information or clarifications if needed. 10. FCC Grant of Certification: If your product meets the FCC's technical requirements and passes the review process, you will receive an FCC Grant of Certification. This typically includes an FCC ID that uniquely identifies your product. 11. Labeling and Documentation: After receiving the FCC Grant of Certification, you can label your product with the assigned FCC ID. This label is often placed on the device itself or its packaging. Maintain all relevant documentation and records related to your product's FCC certification. The duration of the FCC certification process can vary widely based on several factors. Here are some factors that can influence the timeline: 1. Product Complexity: More complex products with multiple wireless technologies, advanced features, or unique characteristics might require additional testing and evaluation, which can extend the certification timeline. 2. Testing Laboratory Availability: The availability of FCC-approved testing laboratories can impact how quickly your product can be tested. Labs with high demand may have longer lead times for testing appointments. Documentation Preparation: The time it takes to gather all necessary technical documentation, specifications, and test plans can influence the overall timeline. Having complete and accurate documentation ready before testing can expedite the process. 4. FCC Review: Once you submit your application to the FCC, their review process can vary in length. The FCC might require additional information or clarification, which can add to the timeline. 5. Application Complexity: The complexity of your application, the accuracy of the provided information, and the completeness of your submission can impact the speed of FCC review. 6. Communication and Response Times: Effective communication between you, the testing laboratory, and the FCC is essential. Promptly addressing any requests for additional information or clarifications can help keep the process moving. 7. FCC Workload: The workload of the FCC can also affect the processing time. If the FCC is handling a large number of applications or experiencing other operational factors, it might lead to delays. 8. Type of FCC Certification: The type of certification you are seeking can also impact the timeline. For example, if you're applying for a new product certification, the process might take longer compared to a certification for a product with similar features that has already been certified in the past. To get a more accurate estimate of how long the FCC certification process might take for your specific product, it's advisable to reach out to an FCC-approved testing laboratory and inquire about their current lead times and the typical duration for products similar to yours. Additionally, staying proactive, providing accurate information, and being prepared to address any requests for additional information can help expedite the process. The FCC certification process is a symphony of meticulous procedures and technical expertise, ensuring that our wireless world remains melodious and interference-free. Like a conductor steering an orchestra towards perfection, the FCC guides manufacturers through the intricacies of regulatory compliance. This process ensures that our devices sing harmoniously within the electromagnetic spectrum, creating a landscape where innovation flourishes and communication flows without disruption. So, the next time you marvel at the wonders of your wireless device, remember the FCC's silent presence, orchestrating the melody of connectivity that shapes our modern lives. Planning to import or manufacture electronics in the United States? In this guide, we explain the certification authorization procedure requirements for devices that fall under the scope of FCC 47 CFR Part 15. This includes documentation, labeling, and testing requirements. FREE CONSULTATION CALL (US, EU & UK) Request a free 30-minute call with Ivan Malloci to learn how we can help you with: Find product requirements Certification and labeling Lab testing REQUEST A CALL What is FCC Certification? The Office of Engineering and Technology (OET) administers two equipment authorization procedures, that is, the certification procedure and the Supplier's Declaration of Conformity (SDoC) procedure. These procedures intend to ensure that radiofrequency devices comply with the Federal Communications Commission (FCC)'s requirements. The certification procedure is the most rigorous equipment authorization procedure, and it's meant for radio frequency devices having the highest potential to cause interference to radio services. Specifically, the certification procedure is mandatory for most intentional radiators (e.g. wi-fi enabled devices) and some types of unintentional radiators. Once the procedure is completed, an FCC-recognized Telecommunication Certification Body (TCB) issues a grant of certification based on the applicant's submitted information and test data. General Requirements Importers and manufacturers of intentional radiators and other devices that require certification must fulfill the following requirements: 1. Have an authorized test lab carry out compliance testing 2. Obtain an FCC Registration Number 3. Obtain a Grantee Code 4. File an application with a TCB for a grant of certification 5. Submit required documentation to a TCB (e.g., technical report) 6. Receive the grant of certification 7. Affix the necessary labeling to the product and its packaging 8. Maintain and retain relevant documentation Equipment Authorization Procedure The FCC requires the responsible party (e.g. the manufacturer) to ensure that its products undergo the certification authorization procedure before they place their devices on the market (if the products require certification). Compliance Testing The responsible party must test its devices to determine compliance with the relevant requirements. The tests must be conducted by an FCC-recognized accredited test lab. Request FCC Registration Number The responsible party a. Must obtain a 10-digit FCC Registration Number (FRN) identifying the company by registering here b. Can also use this FRN for future approvals Request Grantee Code After acquiring an FRN, the responsible party a. Must apply on the Grantee Registration website to obtain a Grantee Code b. Can use the Grantee Code for future approvals Application The responsible party must then apply for a grant of certification with a TCB. The application process mandates that it must submit a technical report to the TCB for review. We explain what type of information must be included in the technical report below. Grant of Certification Once the responsible party applies for a grant of certification, the TCB reviews the submitted information to determine the product's compliance with the FCC requirements. If the TCB deems the product compliant, it uploads the submitted information to the FCC Equipment Authorization Electronic System (EAS) – Database. It then issues the grant of certification to the responsible party. Which products require FCC certification? The FCC requires certification for most intentional radiators, and some types of unintentional radiators. Intentional radiators Here are some examples of intentional radiators that must be authorized via the certification procedure: Wireless garage door openers Wireless universal remote control devices Cordless telephones Wireless alarm systems Wi-Fi transmitters Bluetooth radio devices Note that, for some types of intentional radiators (e.g. the one listed on 47 CFR Part 15.201) it is sufficient to adhere to the Supplier's Declaration of Conformity (SDoC) authorization procedure, which is less stringent. Also, some types of home-built devices are exempted from equipment authorization (see 47 CFR Part 15.23 for details). Unintentional radiators The certification authorization procedure is also mandatory for some types of unintentional radiators. Scanning receivers Radar detectors Access broadband over power line (Access BPL) However, for most unintentional radiators, the SDoC procedure is sufficient. Devices containing intentional and unintentional radiators Some devices comprise components that are classified as intentional radiators (e.g., radio transmitters) and components that are classified as unintentional radiators (e.g., digital circuitry). As such, responsible parties might have these devices undergo both approval procedures: Certification for intentional radiator components SDoC for unintentional radiator components Note that you can also choose to undergo the certification procedure for the whole device. What is the difference between Certification and SDoC? Certification and SDoC are two different types of equipment authorization procedures. Generally speaking, intentional radiators – subject to the certification procedure, while unintentional radiators require the SDoC procedure. Below we list the main differences between the two procedures. Authorization from an FCC-recognized TCB The certification procedure is more stringent as it requires the responsible party to receive authorization from an FCC-recognized TCB. On the other hand, the SDoC procedure simply mandates the responsible party to ensure their product complies with relevant technical standards or requirements. The responsible party is not required to apply for equipment authorization with a TCB. Lab testing Both procedures require the responsible party to provide test reports proving that the product conforms to the relevant requirements, which might vary according to the devices. a. Certification – As part of the procedure, an FCC-recognized accredited test lab must test the product, and the responsible party must submit their test report to a TCB b. SDoC – The responsible party must submit a self-declaration of conformity. However, it is not compulsory to use an FCC-recognized testing lab Labeling requirements Responsible parties who have their products undergo either procedure must include a compliance statement on their product's label. Additionally: a. Devices that require certification must be labeled with an FCC ID b. Devices that require to undergo the SDoC procedure must be labeled with the: Trade name Type or model number/serial number FCC Logo (optional) Documentation The responsible party must submit supporting documentation (e.g., a technical report and test reports) before the FCC grants them certification for their products. Technical Report You must submit a technical report, which includes the required information such as the following: a. Applicant's and their agent's full name, mailing and email addresses, and telephone numbers b. A written and signed statement certifying that their equipment is not exempt from equipment authorization c. An affirmative or negative statement concerning whether the Covered List includes the applicant as a company that manufactures covered equipment d. FCC identifier e. A copy of instructions for installing and operating the device f. A report of measurements offering evidence of compliance with FCC's requirements g. Photographs that clearly show the device's exterior appearance, construction, component placement on the chassis, and chassis assembly You can find the complete list of requirements in 47 CFR Part 2.1033. Grant of Certification The responsible party should file a grant of certification by submitting to a TCB relevant supporting documents and test reports. The TCB reviews the submitted information to determine the product's compliance with FCC requirements and issues a grant of certification on the FCC Equipment Authorization Electronic System (EAS) – Database. Test Report Lab testing is needed to offer evidence of a product's compliance with relevant technical requirements. In the case of the certification procedure, an FCC-recognized accredited test lab must carry out tests (e.g., ANSI C63.10-2013) and issue the relevant party a test report. The responsible party must then submit the test report to a TCB for evaluation. Labeling Requirements Responsible parties of products requiring the certification procedure should ensure that their devices conform to relevant labeling requirements before placing them on the market. FCC ID The FCC certification procedure requires importers or manufacturers to ensure their products bear an FCC Identifier (FCC ID). The FCC ID consists of a: a. Grantee code – this represents the applicant b. Product code – this represents the product; the grantee assigns this code According to 47 CFR Part 2.925, you must ensure that the FCC Identifier: a. Includes the term "FCC ID" b. Is legible and readable c. Is printed with a font size that is consistent with the equipment's dimensions Compliance Statement According to 47 CFR Part 15.19, responsible parties of devices subject to the certification procedure must ensure that their products carry compliance statements such as the following: "This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation." Some devices may necessitate differently-worded compliance statements. For instance, receivers associated with licensed radio services should bear the following statement: "This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference." Additionally, standalone cable input selector switches must carry the statement: "This device complies with part 15 of the FCC Rules for use with cable television service." Placement In general, you should ensure that labeling information such as the FCC ID and the compliance statement is affixed to the product. If the device features an integrated electronic display screen, the relevant party might decide to place the labeling information on it. In this case, it should also place the information in the following locations: User manual Product packaging If the device does not feature an electronic display screen and is too small for carrying a label, then the relevant party must place the labeling information in the following locations: User manual Product packaging or a removable label attached to the device Lab Testing Importers or manufacturers generally need to have their products tested to ensure their products conform to the relevant technical requirements. For example, the FCC requires importers and manufacturers of intentional radiators to comply with the following measurement standard: ANSI C63.10-2013 – American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices 47 CFR Part 2.948 mandates that products requiring authorization under the certification procedure must undergo testing by an FCC-recognized accredited test lab. Here are five such test labs located in the United States: 1. Bureau Veritas Consumer Products Services, Inc. 2. Eurofins Electrical And Electronic Testing NA, Inc. 3. Intertek Testing Services NA, Inc. 4. TUV Rheinland of North America Inc. 5. UL Verification Services Inc. You can find more labs on this page. FCC Certification – Electronic instruments which can generate radiofrequency radiation, as well as that, may create disruption to devices operating in the radio energy spectrum of 9 kHz to 3000 GHz are primarily regulated by FCC regulation. It falls into 3 categories: Unintentional Radiators Intentional Radiators Incidental Radiator What is an Intentional Radiator? A gadget that produces and distributes radio frequency power by radiation or induction would be known as an intentional radiator. Several Wi-Fi, 3G, 4G, 5G, Bluetooth, LTE, and operational RFID gadgets fall under this category. The following are examples: Speakers with Bluetooth. RFID labels that are in use. Smartphones. Microphones that can be used wirelessly. Wireless routers. An unintentional radiator seems to be a gadget that creates radiofrequency power for internal use or communicates messages through connecting circuitry, however, is not intended to release radiofrequency power by radiation. The following are a few examples: Led bulbs Machines for making coffee. USB flash drives Wireless mouse An incidental radiator creates or transmits radiofrequency radiation. Certain gadgets are classed as incidental radiators, and they are frequently used as elements in systems that are either unintended or purposeful radiators. As a result, whenever it refers to basic specifications, it's best to just follow those of the completed gadgets, which are usually radiators, whether intentional or unintentional. The following are a few examples: Electrical motors Mechanical light switches FCC Labeling requirements If a final product includes an unauthorized transmitter as well as the verification is done on the completed project, the final product will receive a certificate of technical authorization. This would receive a certificate of technical authorization (FCC ID) marking is mandatory. The item must have an FCC ID. It can become a label engraved into the product's surface, or it can be shown digitally, however it must remain clear and in a typeface that can be read without magnification. The usage of this FCC sign is another key misconception. For several years, the FCC sign has been wrongly affixed to a number of devices. Never utilize a current item to check for relevant labeling standards; instead, look up the guidelines first. According to the FCC, correct labeling must be examined and applied. The device should qualify for Supplier's Declaration of Conformity (SDoC) in order to utilize the FCC sign specified in FCC 15.19(b). The FCC emblem should be used on devices that do not meet the DoC requirements. Intentional Radiator and Unintentional Radiator are the two types of authorization available for a specific product. This is true for any item that does not need the batteries to be replaced to power it. One problem that producers, as well as some test laboratories, overlook is that if an item has only a USB connection and can only be powered by additional equipment (e.g., a laptop or tablet), the Ac Source Conducted Emissions check must be done on the Ac source another device. The gear supplied with or authorized for usage with the item must be used as the host equipment. Companies must be notified of these laws and criteria, as inappropriate labeling and promotion of an item that does not fulfill the laws' standards can result in costly financial penalties. FFC labeling is mandatory so don't be misled by anybody who does not know the laws and standards.