

Following are the questions submitted to LabHelp about the requirements on modular licensed approvals and antenna gain limitations for 90.217.

----- Original Message -----

From: [LabHelp](#)

To: certification@curtis-straus.com

Sent: Monday, July 26, 2004 8:00 AM

Subject: RE: Question on Licensed Modular Approvals

Question 1:

Can a low power mobile transmitter that will operate under the rule part 90.217 (exemption from Part 90 technical requirements) obtain a full modular approval given that it satisfies all the 8 points of the Public Notice DA 00-1407 ?

The device is small in size (2 x 2 inches at most) and will be used in hosts such as utility meters, etc.

Answer:

No, the public notice applies only to Part 15 devices. However, we have allowed licensed modules according to the following:

Licensed Modular Transmitters

Licensed transmitters may be approved as modules for installation into other, final devices provided the following criteria are met:

The final device is designed for mobile or fixed operation (Portable is not permitted - Reference TCB Exclusion List (17 July 2002) II(g).

The maximum antenna gain to allow compliance with RF exposure requirements is listed on the Grant of Certification for the module

The licensed module must have a FCC ID label on the module itself. That FCC ID label must be visible through a window on the final device or it must be visible when an access panel, door or cover is easily removed. If not, a second label must be placed on the outside of the final device that contains the following text:

Contains "FCC ID: xxxyyyzzz"

The Grant should include the following words in the device description or grant notes:

"modular transmitter" or "transmitter module"

Question 2:

We would like to have some guidance on the output power limit of 120mW for 90.217 (exemption from technical standards) in the case of external antenna use,

1. Is this output power limit at the antenna terminal only?
2. What happens when the antenna gain is added and the EIRP exceeds the 120mW limit? Can this case be still considered to comply with 90.217 or should the device apply for entire Part 90 approval.
3. Is there a limit on the antenna gain if exceeding of 120mW EIRP is allowed?

Answer:

- 1.) Yes, the output power of the device at the antenna terminal should not exceed 120 mW.
- 2.) If the conducted power is less than 120 m W, the device is exempt irregardless of antenna gain. Most Part 90 Grants list the conducted output power.
- 3.) Refer to the specific rule part for antenna gain requirements. You must perform all test required in Part 2 for certification even if there are no technical requirements.