Apsara Energy LLC

1350 Avenue of the Americas

2nd Floor

NY, NY 10019

Date: April 23, 2024

Regarding

FCC ID: 2BC5M-061EW6
IC: 32224-061EW6

Dear Examiner:

This device uses antennas that meet the FCC and ISED antenna requirements as an integral antenna, the antenna connectors of the processing unit and the antennas will be fixed by gluing with the antenna cable during production, changing antennas or cables by end users will result in malfunction.

Sincerely,

Signature:

Printed Name /Title: Ravi Jeyaratnam / Managing Member

Company Name: Apsara Energy LLC

Installation of antennas and RF cables P-108-061/10G/W6E

Description

Fixing of RF connectors

Antennas and all SMA RF connectors are permanently fixed using **LOCTITE EA 3425** two component epoxy adhesive. Fixing with epoxy adhesive is carried out at the following locations: ***A, B, C*** *(Figure 1, page 1);* ***D, E*** *(Figure 3, page 2);* ***F, G*** *(Figure 5, page 4).*

LOCTITE EA 3425 is a two component, high viscosity, thixotropic epoxy adhesive. The thixotropic properties enable this adhesive system to bond rough vertical surfaces made from metal, ceramic, rigid plastics etc.

LOCTITE EA 3425 technical data sheet https://datasheets.tdx.henkel.com/LOCTITE-EA-3425-en_GL.pdf

Securing of threaded joints

All mounting screws are permanently fixed using **LOCTITE 270** threadlocking adhesive. The following threads are fixed with LOCTITE 270 epoxy adhesive: ***1, 2, 3, 4, 5, 6*** *(Figure 2, page 2);* ***7, 8*** *(Figure 3, page 2).*

LOCTITE 270 is threadlocking Adhesive – high strength. Permanent locking. Suitable for all metal threaded assemblies.

LOCTITE 270 technical data sheet: https://datasheets.tdx.henkel.com/LOCTITE-270-en_GL.pdf

Fixing of antennas and RF connectors

Apply epoxy glue to the following positions

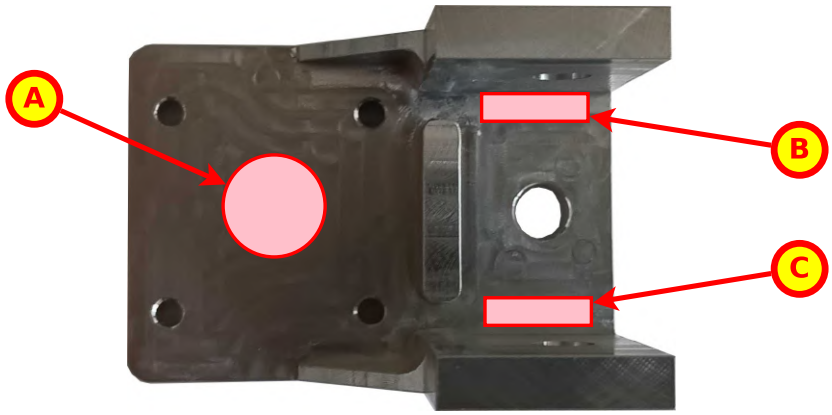


Figure 1: Fixation of antenna holder with epoxy adhesive

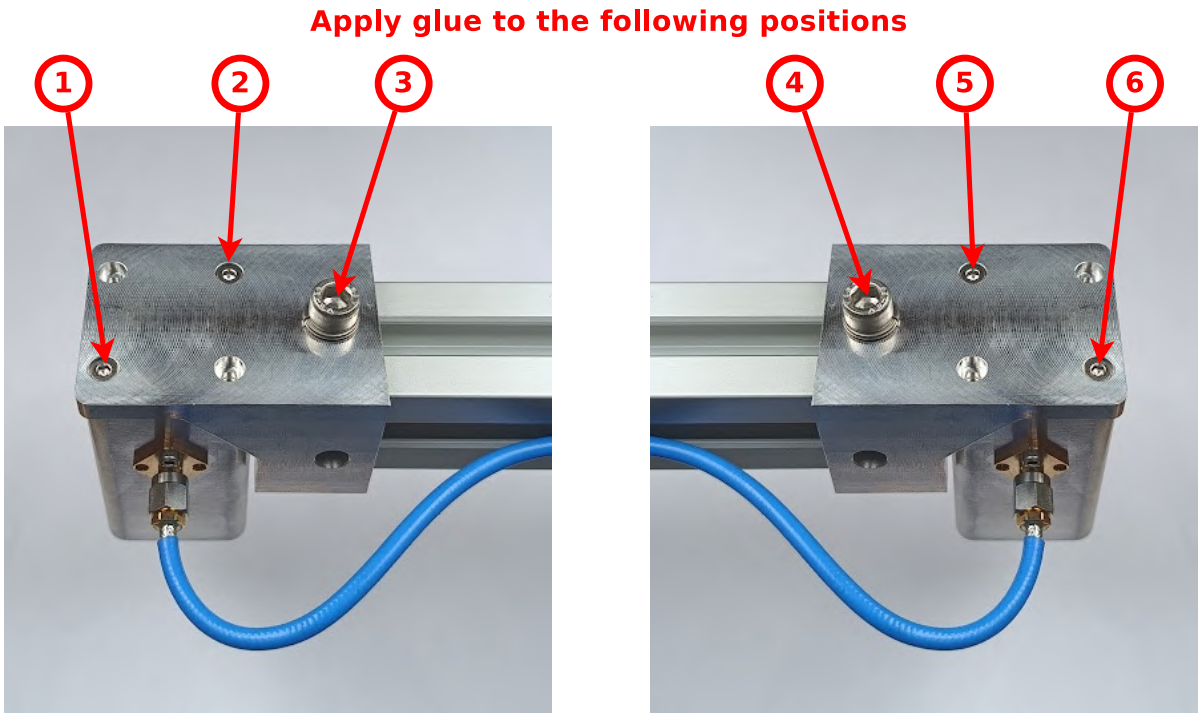


Figure 2: Fixation of antenna screws and antennas with adhesive

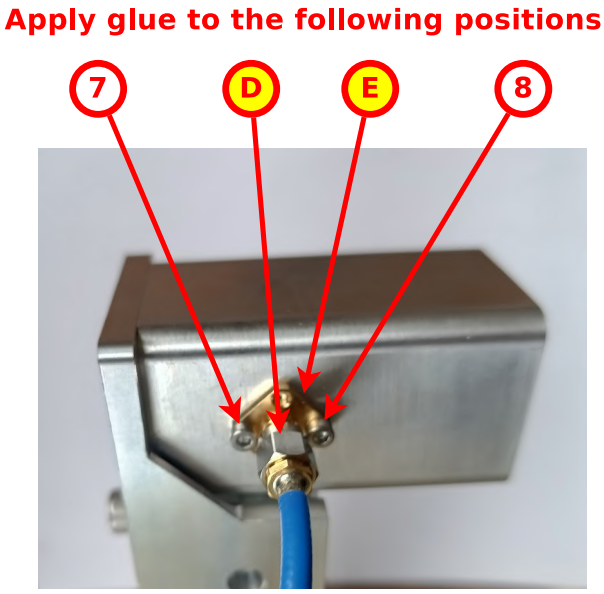
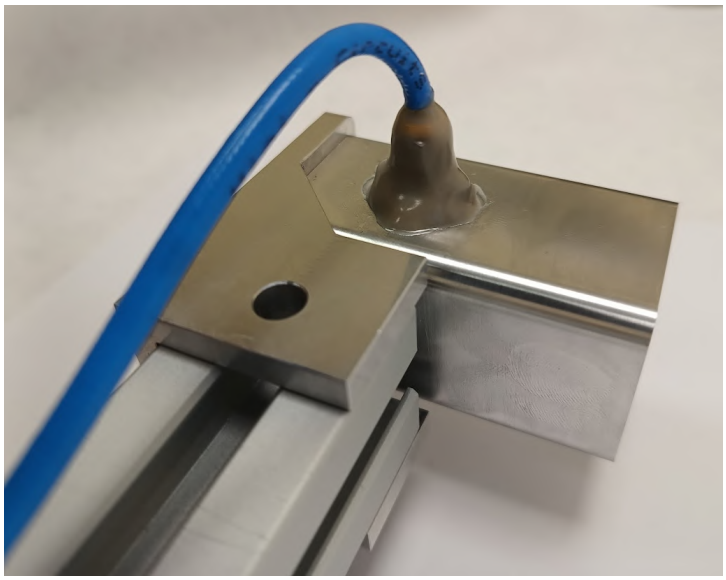
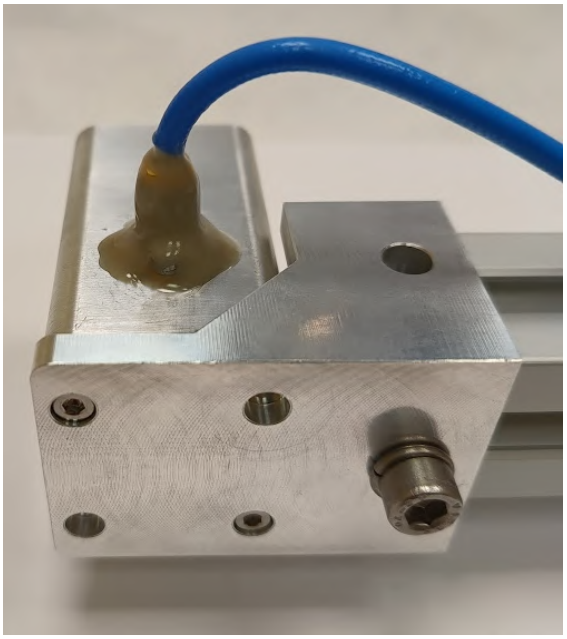


Figure 3: Antenna SMA connector fixation with adhesive

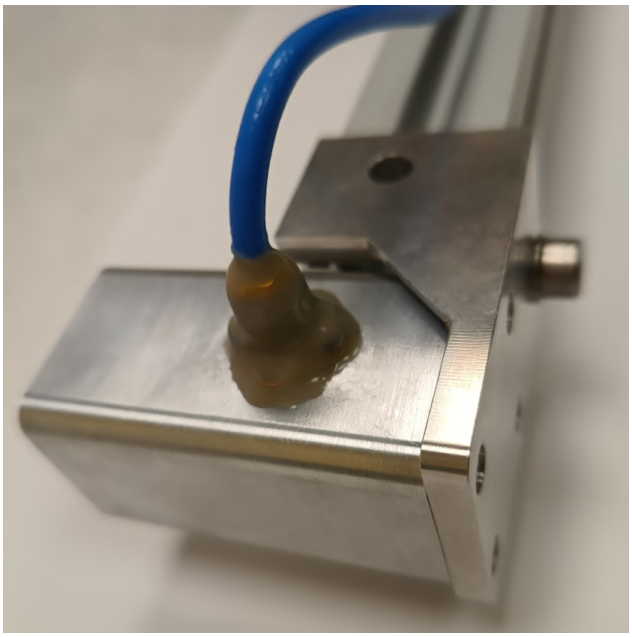
(a)



(b)



(c)



(d)

Figure 4: Covering the antenna RF connectors by LOCTITE EA 3425 epoxy adhesive

Fixing the RF SMA connectors on the main unit

The space between the connectors and the cover is partially filled with LOCTITE EA 3425 epoxy adhesive.

Fill the space around the connectors with epoxy glue

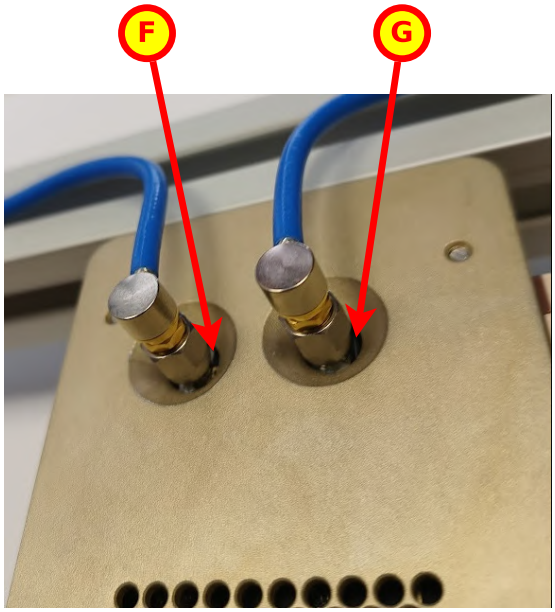
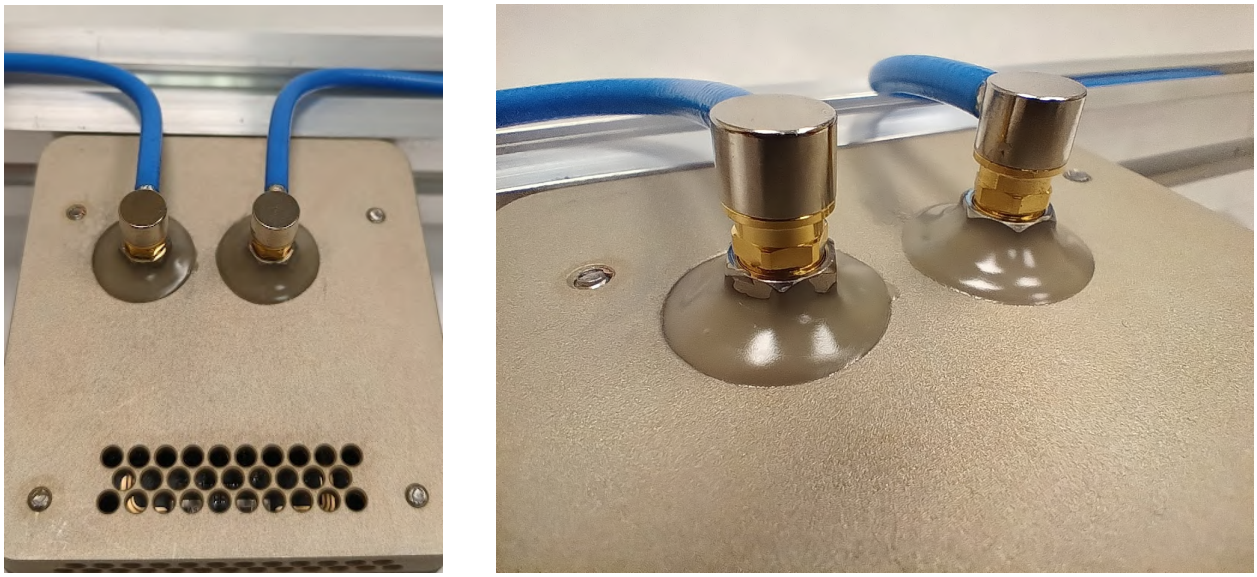


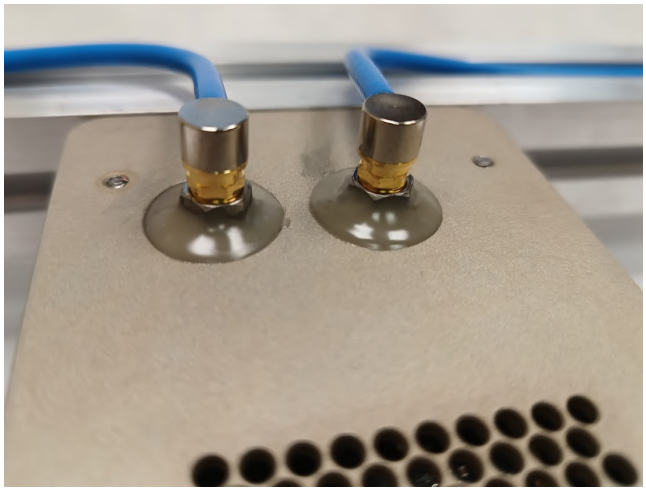
Figure 5: Main unit SMA connector fixation with adhesive



(a) **(b)**

Figure 6: Covering the main unit RF connectors by LOCTITE EA 3425 epoxy adhesive

(a)



(b)

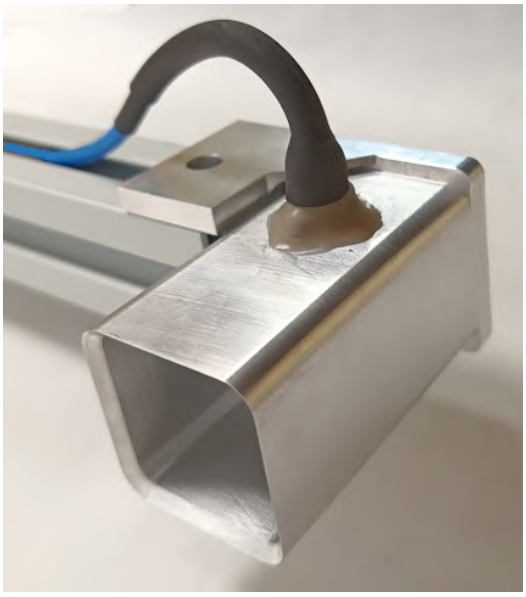
(c)

(d)

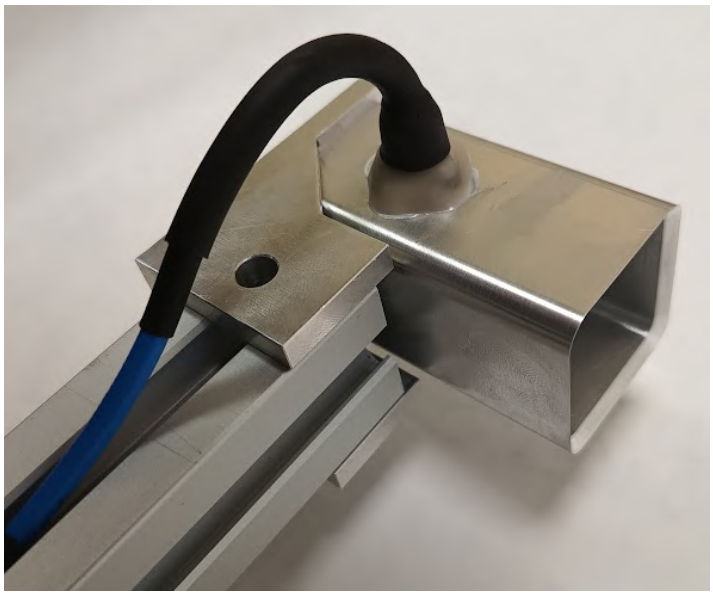
Figure 7: Covering the main unit RF connectors by LOCTITE EA 3425 epoxy adhesive

Covering the connectors with a heat shrinkable tube

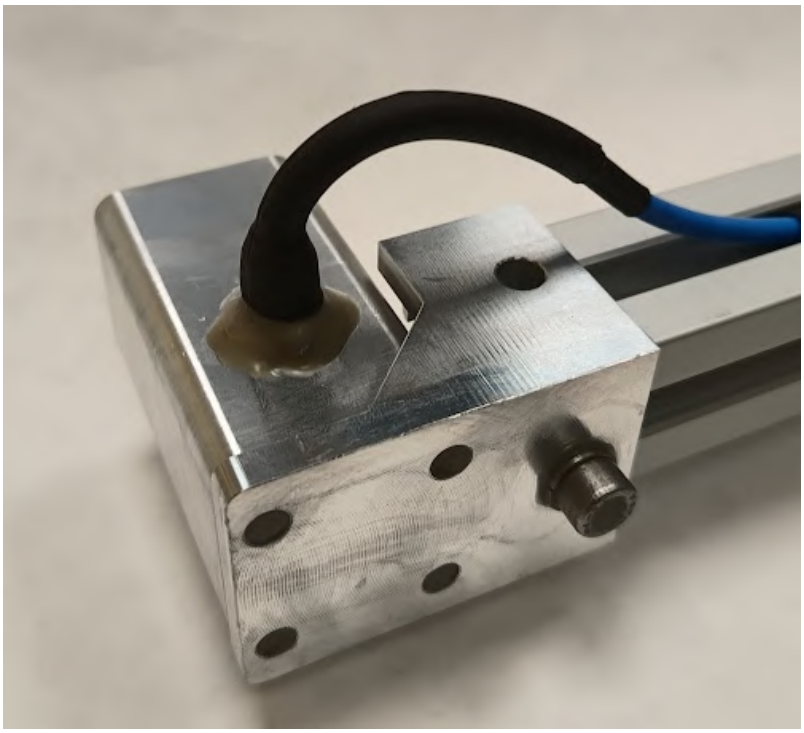
After tightening the SMA connectors with a torque wrench and after fixing the threads with **LOCTITE EA 3425**, the connectors are covered with a heat shrinkable tube at the antenna side.



(a)



(b)



(c)

Figure 8: Covering the connectors with a heat shrinkable tube