

# Development and Qualification of Passive Active Multijunction (PAM) Launcher for LHCD System of ADITYA -Upgrade Tokamak

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A Passive Active Multijunction (PAM) antenna is designed and developed and would be commissioned on the ADITYA-U tokamak. The PAM antenna has many advantages over the grill antenna such as exhibiting a lower reflection coefficient at the plasma densities close to its corresponding cut-off density. The PAM antenna along with its transmission line components are designed to deliver RF power up to 250 kW for 1 second and its design is validated using COMSOL Multiphysics and CST studio. This paper describes the fabrication protocols of each component of the PAM launcher and its transmission line components along with its low power test methodology.

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