



प्लाज़्मा अनुसंधान संस्थान
Institute for **Plasma Research**

Technical Brochure

**A MW LEVEL CW SINGLE or DOUBLE POLE DOUBLE
THROW (SPDT or DPDT) COAXIAL RADIO FREQUENCY
(RF) SWITCH**

**Projects & Technology Transfer Section
Institute for Plasma Research
Nr. Indira Bridge, Bhat, Gandhinagar – 382428**

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INTRODUCTION

The RF coaxial switches are multi-port devices mainly used in VHF (Very High frequency) and UHF (Ultra High Frequency) range for switching the transmission of RF power towards various loads. A motorized section of switch is used to connect and disconnect various loads to transmit RF power.

APPLICATIONS

RF systems for following areas:

- Tokamak/ Fusion reactor related firm/companies/industries.
- Defence, Communications and Space sector
- Institutes and Universities where Radio Frequency subject is taught/ practiced.

SALIENT FEATURES

- Compact, Cost effective and Fast switchover
- Maintain constant characteristic impedance after switchover
- Isolation and return loss better than ~ 26 dB between 36 to 65 MHz
- Safe for voltage breakdown at MW level RF power

INFRASTRUCTURE REQUIRED

- About 6 square meter space is required for assembly, testing & installation of the system
- The system consists of a RF Switch with support structure.

MAJOR RAW MATERIALS

- Aluminum 6061
- ETP copper
- Teflon and Delrin

HUMAN RESOURCE REQUIRED

- One graduate having Physics degree or an electronics engineer.
- One mechanical engineer
- One mechanical technical assistant

For details contact:

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