

SPV POWER PACK FOR MICROWAVE REPEATER STATION

INTRODUCTION

Power System reliability is critical for most communication applications and availability must be near 100%. Most systems are in remote locations with limited access and often operate in extreme weather conditions most part of the year. For these reasons, PV Systems are increasingly being used to supply power for telecommunications applications. One such application is SPV Power Pack for Microwave Repeater Stations.



KEY FEATURES

- Highly Modular in nature
- Little or no maintenance required
- Non-polluting in nature
- Depends on inexhaustible source of energy
- Easy to operate
- No recurring cost
- Ideal for remote place being a stand alone self reliant system

SPECIFICATIONS

	<u>TYPE-I</u>	<u>TYPE-II</u>	<u>TYPE-III</u>
SPV Modules	: 2.0 KW	3.5 KW	5.0 KW
Nominal system Voltage	: 48 VDC	48 VDC	48 VDC
Load Current	: 4-6 A	7-10 A	12-15 A

SYSTEM DESCRIPTION

Solar Photovoltaic Power Pack System has been designed to power Microwave Repeater Stations continuously for 24 Hrs. The PV Modules charge the battery bank through an electronic charge Controller. The Charge Controller controls the charging as well as indicates the battery status. The power generated is thus used for powering the M/W Station.

The system has following features:

- A. It automatically charges the battery during sun shine hours and simultaneously supplies power to the load. Battery supplies power to the load automatically in the non-sun shine hours.
- B. Charge controller indicates the charging through Green LED.
- C. Load gets automatically cut-off if battery voltage goes below a preset level. In this condition RED LED turns on and remains ON till battery again gets charged and reaches a predetermined level.
- D. In case of overcharge the PV Modules gets disconnected from the battery so that further charging gets stopped, Yellow LED turns ON and remains ON till battery voltage reduces to a predetermined level.
- E. Short circuit protection has been provided using fuses.
- F. Reverse polarity protection and indication has been provided.

DEPLOYMENT

REIL has supplied and installed over 15 SPV Power Packs for Microwave repeater stations in various parts of the country. These systems are working satisfactorily under adverse climatic conditions of very high temperature, dust-storms, etc.



MICROWAVE REPEATER STATION AT SAWAI MADHOPUR

For further information contact:

RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.
(A Public Sector Enterprise - ISO 9001 Company)

2, Kanakpura Industrial Area, Sirsi Road, JAIPUR - 302 012 (Rajasthan) INDIA
Telephone : 91-141-352841, 203038 Fax : 91-141-352841, 202701
E-mail : reiljp@jp1.dot.net.in Web Site: www.reiljp.com

