



EXHIBIT F SCOPE OF WORK/SPECIFICATIONS

INTRODUCTION

GRTC Transit System is seeking bids from eligible suppliers for supply and delivery of 25 units of Polycrystalline Photovoltaic Module ALT30-12P 30Watts, 12 Volts Solar Panels designed for off grid applications.

Bidders are requested to provide the estimated delivery after receipt of the purchase order.

Hardware

- Gateway 25x (23 + 2 Spares)
- Enclosure Assembly 23x
- Mounting Bracket
- Installation Kit

Electrical Specifications:

- Open-Circuit Voltage (Voc) 22.3V
- Optimum Operating Voltage (Vmp) 18.0V
- Short-Circuit Current (Isc) 1.82A
- Optimum Operating Current (Imp) 1.67A
- Maximum Power at STC* (Pmax) 30Wp
- Operating Temperature -45°C to 85°C
- Power Tolerance $\pm 5\%$
- Nominal Voltage 12V
- Maximum Series Fuse Rating 4A
- Maximum System Voltage 600V
- Module Efficiency 12.4%

Temperature Characteristics

- Nominal Operating Cell Temperature (NOCT) $48 \pm 3^\circ\text{C}$
- Temperature Coefficient of Pmax $-0.43\%/^\circ\text{C}$
- Temperature Coefficient of Voc $-0.36\%/^\circ\text{C}$

- Temperature Coefficient of Isc +0.06%/°C

Module Characteristics

- Module Dimensions 690 x 350 x 25mm (27.2" x 13.8" x 1")
- Weight 3.2kg (7lbs)
- Four (4) mounting holes