



Fardux

# The Solar Solution

*Flexibility, visibility, control*

As an industry leader in surface data acquisition, FieldView has been developed with complete flexibility in mind, delivering remote sensor data from field assets wherever they may be and presenting this in a way that provides operators the capability to be more productive and make better decisions.

The Fardux Solar Unit (FSU20) is an integral part of the FieldView solution by providing a reliable power source for field hardware in the harshest of environments. With its compatible inverter, it is also suitable for AC applications.

## OVERVIEW

The modular designs of our AirWave gateway, DataCapture RTU and Output Switching Box are such that, in the absence of a local power source, the Fardux Power Supply Unit (PSU) can be solar-powered with minimum intervention.

The Fardux FSU20 is a 20 Watt self-contained solar-powered system. It is ideal for remote power requirements and well suited for the harsh demands of the oil and gas industry, with a certified product available for Zone 2 hazardous area applications. Fardux can also supply panels in accordance with customer requirements including for zone 1 ratings.

Typical applications for this new energy and cost saving concept are to monitor remote pipelines and unmanned offshore oil and gas installations where the location and the proximity of a hazardous area deem conventional power sources and manpower to be less economical.

The solar panel connects directly to a solar controller which provides protection to the whole system using highly advanced technology. It also provides longer battery life and improved system performance with its self-diagnostics capabilities. Power is supplied to recharge the battery and allow unattended operation of systems in remote locations.



The modular design provides the required flexibility to construct a solar power system to meet the exact needs of the SCADA application. Additionally, the FSU20 allows for a certain degree of redundancy and is also easy to configure should additional devices be removed or added. Depending on the distances and number of sensors, the FSU20 can be used to power the AirWave and DataCapture modules for numerous applications.

Put simply, Fardux FieldView combined with our solar system is a complete solution which is safe, cost effective and proactive approach to data management.

# Solar Unit FSU20

## TECHNICAL DATA

### SOLAR PANEL

Type of Cell	Mon / Multi Crystalline Silicon
Power (Pm) nominal	20 Watts
Open Circuit Voltage (Voc)	21.0 Volts
Short Circuit Current (Isc)	1.2 Amps
Voltage at Maximum Power (Vmp)	17.0 Volts
Current at Maximum Power (Imp)	1.18 Amps
Maximum System Voltage	600 Volts
Solar Cells per Module	36
Dimensions (L x W x D)	485 x 350 x 22mm
Weight	2.1kg

All electrical parameters specified at STC: 25°C cell temperature; 1000 W/m<sup>2</sup> irradiance; AM 1.5

### SOLAR CONTROLLER

Rated Solar Current	<b>30 Amps</b>
Rated Load Current	30 Amps
System Voltage	12/24 Volts
Operating Temperature	<b>-40°C to +60°C</b>
Battery charging	optimised four stage to increase battery capacity and life
Options:	digital meter, positive ground, remote temperature probe
Dimensions (L x W x D)	153 x 105 x 55mm
Weight	0.34kg

### BATTERY UNIT

Capacity	33 Amp-Hours at 20 Hours 29 Amp-Hours at 5 Hours
Voltage	12 Volts
Operating Temperature	-20°C to +45°C
Self-Discharge Rate	< 3% per month (depending on storage conditions)
Dimensions (L x W x D)	207 x 132 x 174mm
Weight	12kg

## Fardux

### WHY FARDUX?

We have always believed that the supply of our oil and gas data acquisition products and solutions is just the beginning of our relationship with our customers.

We endeavour to provide support from the moment the decision is made to purchase any product, and then throughout the product's lifecycle. We always work hard to ensure our customers are provided with the best solutions, support and advice.

*All the data, when and where you want it*



### HEAD OFFICE

Crossways Business Centre,  
Stalham Road,  
Hoveton,  
Norwich,  
UK,  
NR12 8DJ  
Tel: +44 (0)1603 777980  
Email: sales@fardux.co.uk  
Web: www.fardux.co.uk

### UAE OFFICE

Office E-7 (DAFZA),  
PO Box 293815,  
Dubai,  
UAE  
Tel: +971 (4) 2555003  
Email: sales@fardux.ae  
Web: www.fardux.ae