

GILL

Meteorological Instruments
for Solar Energy



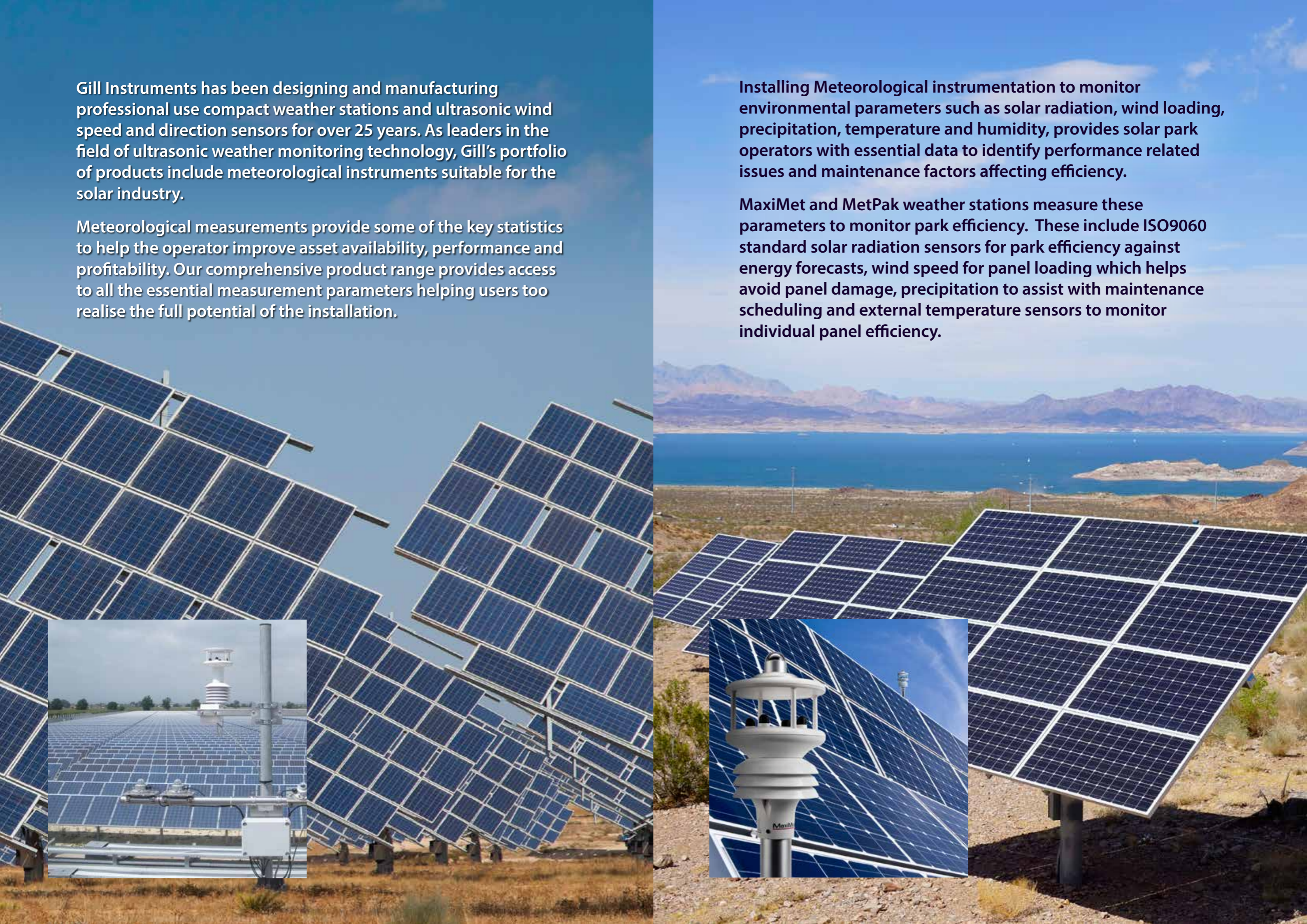
gillinstruments.com

Gill Instruments has been designing and manufacturing professional use compact weather stations and ultrasonic wind speed and direction sensors for over 25 years. As leaders in the field of ultrasonic weather monitoring technology, Gill's portfolio of products include meteorological instruments suitable for the solar industry.

Meteorological measurements provide some of the key statistics to help the operator improve asset availability, performance and profitability. Our comprehensive product range provides access to all the essential measurement parameters helping users too realise the full potential of the installation.

Installing Meteorological instrumentation to monitor environmental parameters such as solar radiation, wind loading, precipitation, temperature and humidity, provides solar park operators with essential data to identify performance related issues and maintenance factors affecting efficiency.

MaxiMet and MetPak weather stations measure these parameters to monitor park efficiency. These include ISO9060 standard solar radiation sensors for park efficiency against energy forecasts, wind speed for panel loading which helps avoid panel damage, precipitation to assist with maintenance scheduling and external temperature sensors to monitor individual panel efficiency.



MaxiMet provides solar park operators with the essential meteorological parameters to help monitor efficiency and optimise maintenance routines. The compact weather stations each measure different meteorological parameters including solar radiation, precipitation, wind speed and direction, temperature, humidity and more.

MetPak is a professional weather station with increased flexibility. The range offers users higher accuracy industry standard sensors along with the ability to increase the number of parameters by adding additional sensors using standard analogue inputs. Solar users can combine a range of different sensors in a cost-effective package.

WindSonic is a low-cost, high quality anemometer giving wind speed & direction data in a robust polycarbonate or heated aluminum for extreme cold conditions

Key Features and Benefits

- **MULTIPLE PARAMETERS:** Wind speed & direction, temperature, humidity, pressure, precipitation, dew point, solar radiation.
- **ISO9060 Solar radiation sensors fitted for best measurement.**
- **MODBUS on all sensor options for easy and direct interfacing into SCADA systems.**
- **SERVICE LOG in-built** allowing the operator/maintainer to receive the last calibration date from the station.
- **DIGITAL INCLINOMETER** where the solar radiation sensor is to be mounted at the same angle of incidence as the PV panel.
- **IN-FIELD CALIBRATION** using reference sensor alongside the installed MaxiMet.
- **EXTERNAL TEMPERATURE PROBE (RTD)** option is available for all MaxiMet models to allow the park owner to monitor the rear of the PV panel for efficiency.

Key Features and Benefits

- **MULTIPLE PARAMETERS:** Wind speed & direction, temperature, humidity, pressure, precipitation, dew point.
- **MODBUS** for easy and direct interfacing into SCADA systems.
- **JUNCTION BOX** for additional device connection
- **EXTERNAL TEMPERATURE PROBE (PRT)** option is available to allow the park owner to monitor the rear of the PV panel for efficiency.
- **TWO ANALOGUE INPUTS** for ISO9060 Solar radiation sensors to monitor park efficiency.
- **UP TO 75 m/s WIND SPEEDS** TO calculate the wind loading on PV panels.
- **TIPPING BUCKET** rain gauge input to allow the operator/maintainer to predict cleaning schedules and possible reduction in performance.

WIND SPEED & DIRECTION

TEMPERATURE

SOLAR RADIATION

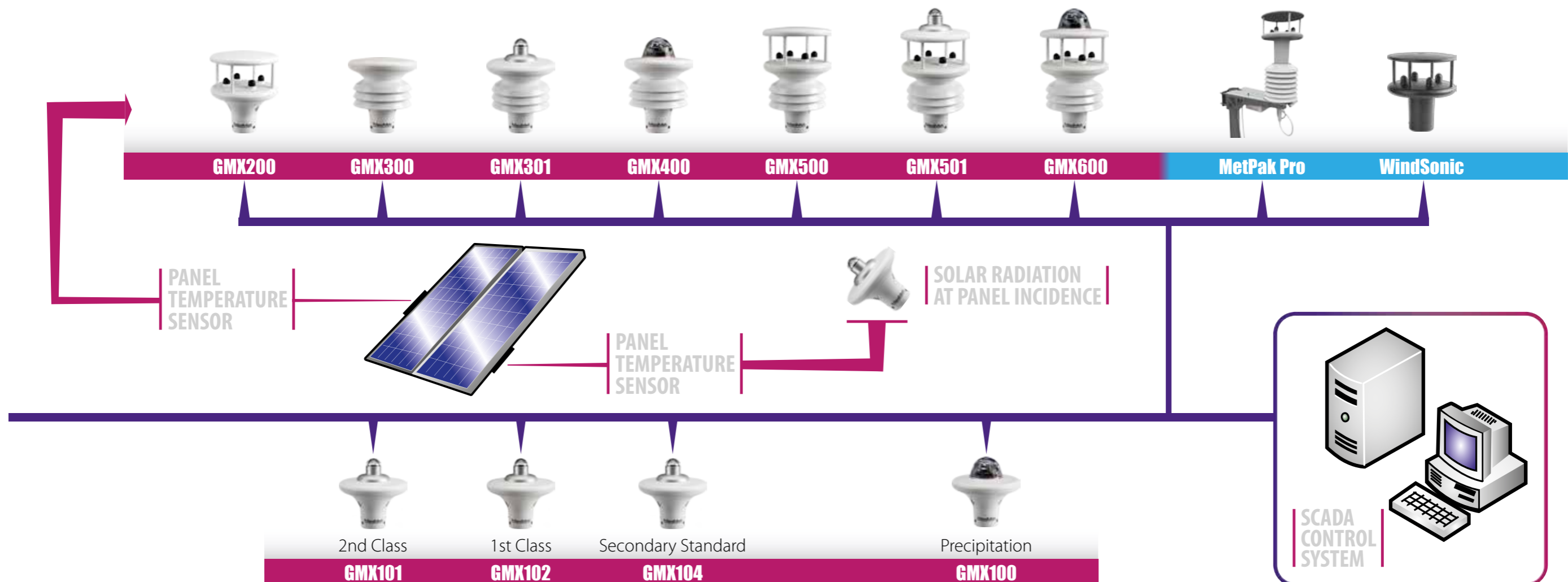
PRECIPITATION

HUMIDITY

PRESSURE

DEW POINT

SUNSHINE HOURS



Gill Instruments Limited

Saltmarsh Park
67 Gosport Street

Lymington
Hampshire

SO41 9EG UK

Tel: +44 (0)1590 613 500

Email: anem@gillinstruments.com



gillinstruments.com

© Gill Instruments Limited.

Gill® is a registered trademark of the Gill Group of Companies.