

# TEST, MEASUREMENT & CONTROL SOLUTIONS



AUTOMOTIVE | AEROSPACE | TRANSPORTATION | ENERGY  
DEFENCE | ENVIRONMENTAL | CIVIL ENGINEERING  
CONTROL & AUTOMATION | QUALITY ASSURANCE  
OEM PRODUCTS | ...AND MUCH MORE



## VIDEO SOLUTIONS

### FOR ON BOARD INSTRUMENTATION AND TESTING APPLICATIONS

#### gle/HD-RVC-510 Ruggedized High Definition Video Camera

Self contained motorized lens, full HD color, designed for harsh environments with HD-SDI output.

#### gle/RMVC-200v2 Ruggedized Miniature Video Camera

Standard definition, color PAL or NTSC output, designed for harsh environments with HD-SDI output.

#### gle/HD-SDI-Splitter-100-HD-SDI Video Splitter

SMPTE 292M, robust and compact coupler device.

#### gle/VIDEO-AMP-100-B-CVBS Video Signal Buffer Module

Robust and compact "T" coupler device.

#### gle/VGA-BUFF-100-VGA Video Splitter / T-Buffer Module

Robust and compact "T" coupler device.



## GROUND TELEMETRY

### HARDWARE AND SOFTWARE PRODUCTS FOR TELEMETRY GROUND STATION

#### gle/UDP-001 USB 2.0 Based IRIG-106 PCM Decoder

Compact PCM decom, mainly intended for laboratory tests and validations of telemetry data acquisition system, pre-flight checks and for on-board PCM data monitoring...

#### gle/TelemetryStudio Software package for PCM Telemetry Applications

A powerful tool for IRIG 106 ch.4 PCM stream decommutation, parameters extraction, data storage, real-time numerical and graphical display and data processing.

#### gle/kTools XidML compatible PCM & IENA QuickLook Telemetry Package

For systems test, calibration, troubleshooting, pre-flight checks, onboard monitoring, ...

#### gle/GTAS-001 GPS Tracking Antenna System

To control the angular position (Azimuth/Elevation) of one or more ground telemetry tracking antennas.

#### gle/Telemetry Ground Station Integrated Solutions

Customer-tailored solutions to fulfil from simples pre-flight tests and data evaluation onboard, mobile or fixed, single or multi-users applications up to large network-distributed architectures.

#### gle/TCSw IRIG-B Time Code Generator /Reader

A software tool with the capability to generate and read time code by means of PC sound-card.

## PROTOCOL CONVERTERS

### A FAMILY OF PRODUCTS DEDICATED TO DIGITAL DATA CONVERSION

#### gle/ASC-573R ARINC 573 / 717 Compact & Rugged Decoder for airborne or test-rig applications.

Converts Harvard Bi-Phase coded ARINC 573 / 717 to serial RS 232 or optionally to USB.

#### gle/CNT-200 Rugged & Customizable Interface Controller / Protocol Converter

To interrogate and parse parameters from RS 232 / 422 sources, format and send data to serial RS 232 / 422 outputs (e.g. to convert NMEA GPS stream to binary or other formats) and/or to drive up to 32 bits on a TTL logic port.

#### gle/SBC-100 Customizable Standalone Serial to CAN Bus Converter

A cost-effective solution to connect virtually any RS 232 device to CAN Bus. It is user programmable for different asynchronous serial protocols from different sensors or systems (GPS receiver, Inertial Systems, Transducers, ...).





# GPS / GNSS

## POSITION & TIME RECEIVERS FOR INSTRUMENTATION & TESTING

### gle/RGU/Gxx/001 Ruggedized Multi Constellation GNSS Receivers

A family of compact, high performance and flexible GNSS receivers designed to operate under demanding environmental conditions. It offers specific features for an easy integration with onboard testing instrumentation.

### gle/RGM/G2T/HDA Space-Proven Miniature & Rugged GNSS Receiver

Cost-effective, high performance, GNSS receiver with Mil-Bus 1553 interface and a rich output data set, qualified for space launchers and other high-dynamics conditions.

### gle/HGIG-100 Handheld GPS IRIG Generator

A battery powered, compact and robust GPS/UTC synchronized time-code generator which provides an IRIG B (1 kHz, amplitude modulated) output.



## DATA ACQUISITION & ONBOARD TESTING PRODUCTS

### gle/AC-CTA-100 Rugged AC Current Transducer

Compact and rugged current transformer for airborne instrumentation.

### gle/AATS-001 Airborne Air Temperature Sensor

Small, lightweight and rugged PT100 sensor for airborne instrumentation.

### gle/SmartRTD-200R Compact & Rugged multichannel acquisition unit for RTD sensors

USB 2.0 for setup, data output and quick-look; RS 232 / 422 auxiliary data output.

### gle/SmartZOC-200R Compact & Rugged control & acquisition unit for Pressure Scanners

USB 2.0 for setup, data output and quick-look; RS 232 / 422 auxiliary data output.

### gle/SDR+/100 RS 232 Serial Data Recorder

Standalone, solid-state RS 232 recorder for asynchronous serial data streams.

### gle/TBM-100 Telemetry Buffer Module

Rugged and compact units to decouple, amplify/attenuate and split digital signals. Are also available isolation, split and buffer modules for dual redundant Mil-Bus 1553.

### gle/TCD-100 Miniature Onboard Time Code Display

For amplitude modulated IRIG-B, DCLS IRIG-B (TTL level) and GPS-NMEA codes.



Discover other products and more details on our WEB ON CD products catalogue, or visit: [www.greenlake-eng.com](http://www.greenlake-eng.com)



# Greenlake Engineering

designs, develops, manufactures and supports TEST, MEASUREMENTS AND CONTROL SOLUTIONS for a wide range of industrial and research fields.

We aim to deliver high quality solutions counting on our long experience and staying focused on innovation.

Our range of products includes:

PROTOCOL CONVERTERS • AIRBORNE TESTING PRODUCTS • MEASUREMENT AND MANAGEMENT SOFTWARE • SIGNAL CONDITIONS FOR VARIOUS TYPES OF SENSOR • DATA ACQUISITION HARDWARE • REAL TIME SIGNAL PROCESSING SYSTEM • GNSS POSITION AND TIME SOLUTIONS • GROUND TELEMETRY SYSTEMS • VIDEO SOLUTIONS • and much more.

Our know-how is based on understanding the measurement of physical parameters and of the related interfering factors which typically play a significant role in data monitoring and/or acquisition processes.

We provide solutions for a wide range of industrial applications and for many areas of scientific and academic research, like:

AEROSPACE • AUTOMOTIVE • TRANSPORTATION • ENERGY • DEFENSE • ENVIRONMENTAL • CIVIL ENGINEERING • CONTROL AND AUTOMATION • QUALITY ASSURANCE • OEM PRODUCTS • and much more.

Moreover we offer our expertise as a partner in special projects, developing customized solutions to meet even the most particular applications and technical requirements thanks to the most advanced technologies, like DSPs, FPGAs, microProcessors and various data communication interfaces as RS 232/422, CAN bus, USB and Ethernet.

Long-experienced in measurement and signal processing, our engineers have the capability to assist our customers in choosing the best solutions for their applications and to support them for installation and maintenance.



Company certified UNI EN ISO 9001-2008

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