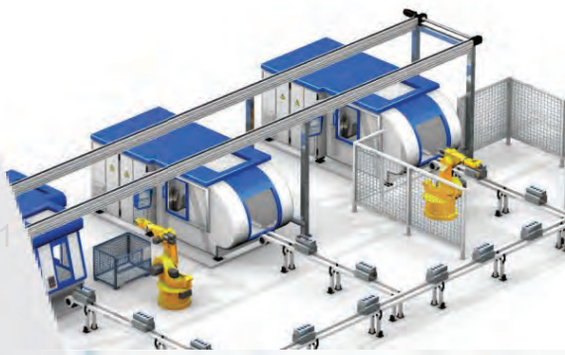
SCIENCE GATE
Your Automation Partner



PRODUCT GUIDE IX

www.scigate.com.sg

INDUSTRIES WE SERVED.....

Wide range solutions Satisfaction guaranteed

Advanced technology Cost effective

Free application consultation and demonstration

Endless automation systems

Well-trained and dedicated engineers

CONT

HMI

Proface 4
Graphic Touch Panel and PLC

METROLOGY

Micro Epsilon 18
Displacement Sensor

Solartron Metrology 22
LVDT

DRIVE

Control Technique 16
AC, DC and Servo Drive

INDUSTRIES WE SERVED.....

Research
Medical
Wastewater
Industrial Automation
HDD
Chemical
Aerospace
Industry 4.0
Precision Engineering
Marine
F&B
Building
Internet of Things
Automation
Semiconductor

ENTS

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IoT

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Pressure Sensor

**For more information, please log on to http://www.scigate.com.sg*

BLUE

ST6000 Series: Basic HMI

Pro-face™ by Schneider Electric

- Aluminium front panel
- 16 million colors
- Better graphics and font
- Dual ethernet ports

Wide	Size	4”	7”	10”	12”	15”	I/F	COM	LAN	USB
4:3	Size	5.7”	10.4”				I/F	COM	LAN	USB	SD

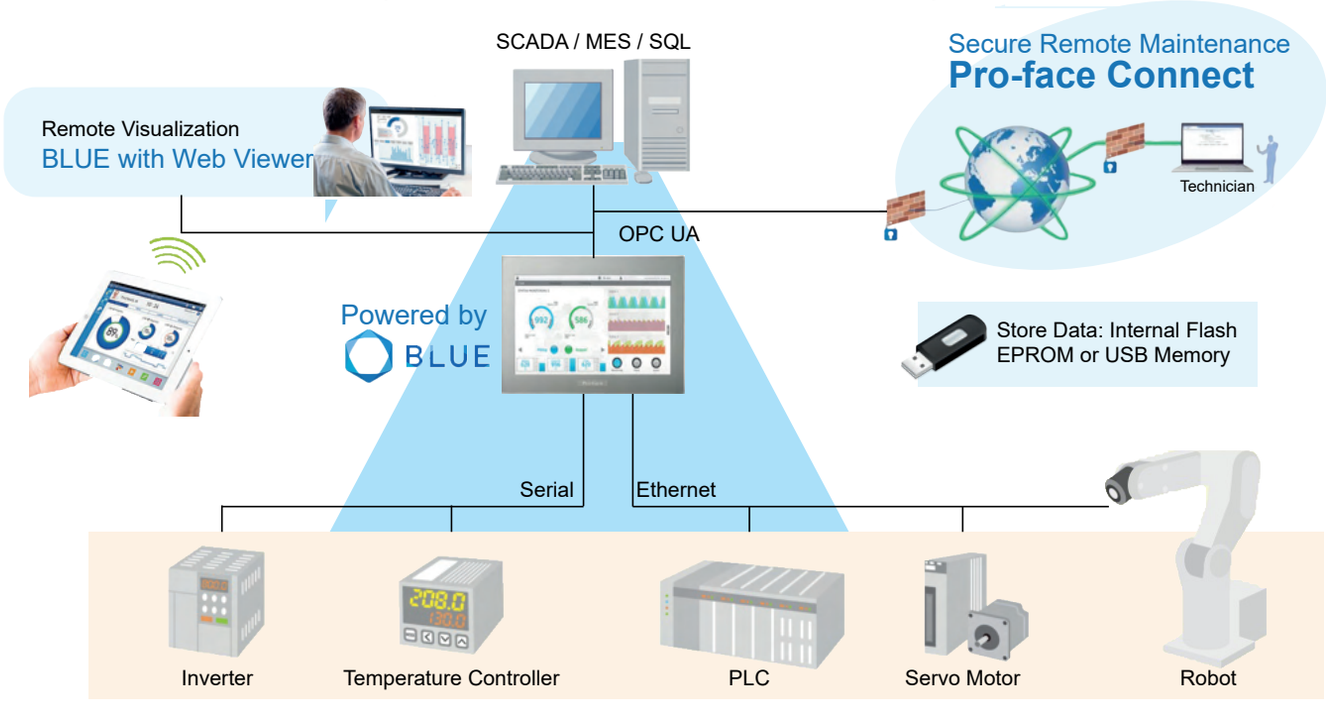
BLUE

Create nice-looking HMI applications

Design HMI screen using our creative yet easy-to-use editor software

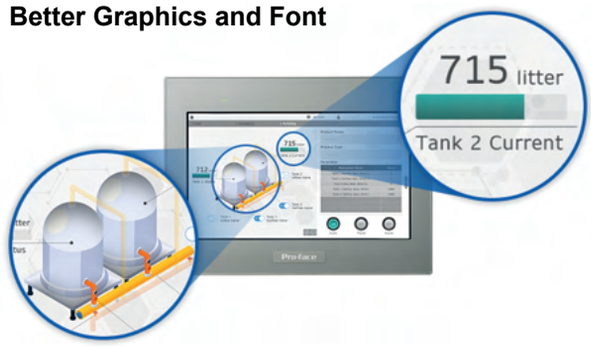
USB 2.0 (Type A)
USB 2.0 (Micro B)
Ethernet 1
Ethernet 2

Seamless and secured connectivity with various devices to enhance their flexibility and increase value



Connect to controllers of various maker, models without programming

Better Graphics and Font



Display beautiful fonts with anti-aliasing. Customize gradation and transparency to meet your needs

See status of equipment or devices in the right place at the right time

Remote Visualization on PC or Tablet / Smartphone with new Web View features of BLUE.

*For more information, please log on to https://www.scigate.com.sg

Easy Migration

Utilize the current project file with the same software (GP-Pro Ex)

Panel cut-out compatibility

Minimum modification to install new HMI with the same interface and location

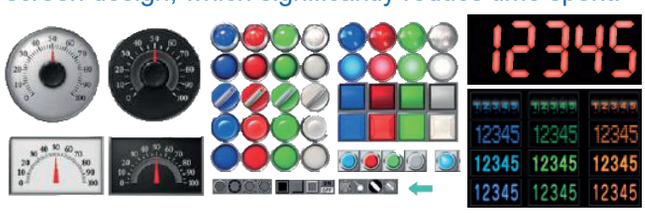
GP-Pro EX

Operation Management for HMI

User-friendly yet powerful

Download sample parts for immediate use

Wide variety of ready-made sample parts for best screen design, which significantly reduce time spent.



Pro-face Remote HMI

Software that enables tablets and smartphones to display and operate the exact same screen as the on-site HMI.

Secure design with full feature functions taking into consideration tablet operations.

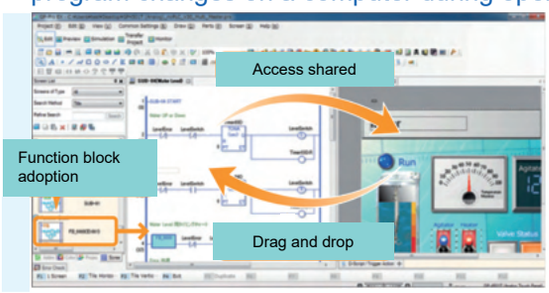
Supported OS	Android OS, iOS (iPhone, iPad, iPod touch)

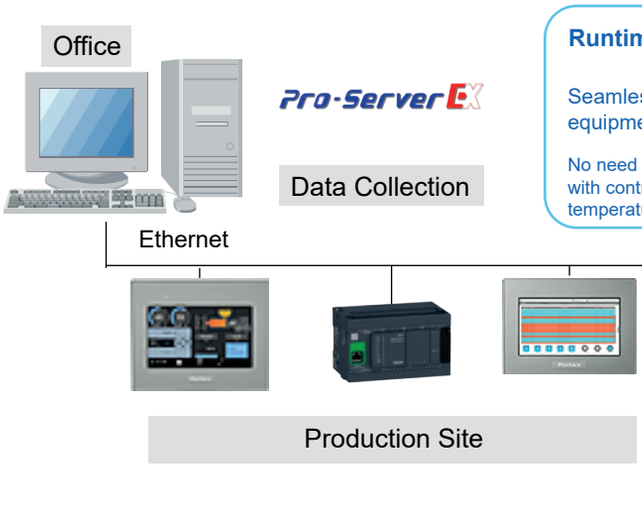
Networking of the entire site to collect data collectively without programming

Logic Sequence Program

Program using popular ladder language

- Screens and logic programming can be edited with the same software.
- Online editing function allows you to make program changes on a computer during operation.





Runtime engine WinGP

Empower your Windows based PC with projects created by GP Pro EX

Seamless communication with control equipment

No need to develop a driver to communicate with controlequipment such as a PLC or temperature controller.

Cooperation with user database using dedicated API

Settings of WinGP are editable and device address read/write of the connected device can be done by the user application.

Collecting accurate information, and analyzing and utilizing all your data will lead to improvement in working processes!

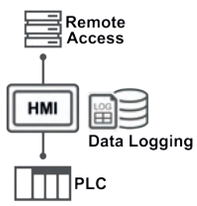
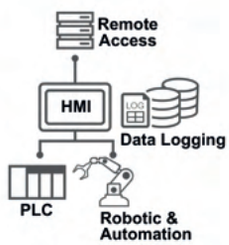
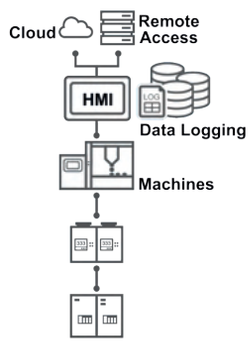
For more information, please log on to https://www.scigate.com.sg

Easy and efficient way to connect OT and IT

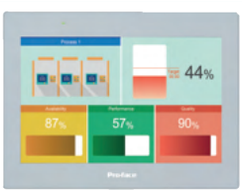
Pro-face™ by Schneider Electric

IT (Information Technology)

Enable the IT system architectures to build secure robust remote solutions quickly

Data	Simple	Complex	Line Management	Edge Box
				
++++		Industrial PC GP-Pro EX · BLUE · Open Studio	Industrial PC GP-Pro EX · BLUE · Open Studio	Edge Box Open Studio
+++	STM6000 LT4000M STC6000 GP-Pro EX	ST6000E SP5000 GP4000 GP-Pro EX		Multi Convertor GP-Pro EX
++	ST6000 STM6000 GP-Pro EX	STM6000E GP-Pro EX		Gateway Box BLUE
+	ET6000 GP4100 GP-Pro EX			

From Entry, Simple HMI to Advanced Powerful HMI, we support all kinds of HMI Needs


ET6000 Series

ST6000E Series

PS6000 Series

Edge Box PC

LT4000M Series

SP5000 Series

GP4000 Series

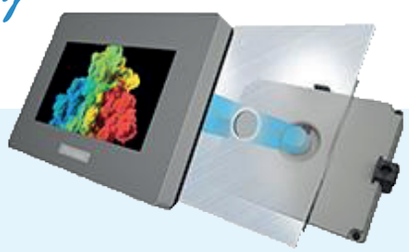
Edge Box

*For more information, please log on to https://www.scigate.com.sg

Pro-face™

by Schneider Electric

Easy Installation



Basic HMI / 22m Hole Mounting

STM6000 Series

Optimize operations and machine information.

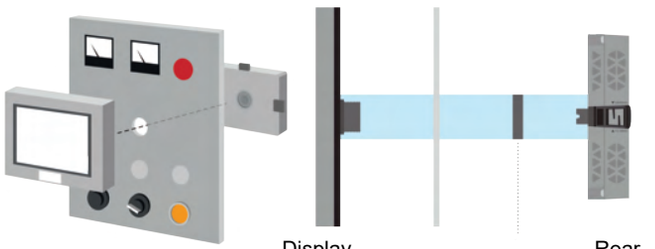
Size: 4" Wide | 7" Wide

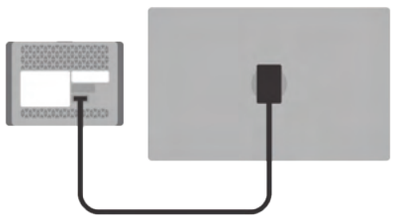
I/F: COM | LAN | USB

BLUE | GP-Pro EX

Easy and Fast Installation

STM6000 can be installed easily as only a φ22mm mounting hole is used as compared to conventional rectangular cut out hole.





Flexible Installation

Thanks to modularity design, for specific applications (space, temperature, or vibration constraints) product can be separated with cable accessory 3m, 5m,10m to install the display module on the panel door and the rear module on DIN rail with dock station adapter.

Advanced (Modular HMI)

Best Performance in Class

SP5000 Series

Flagship model achieving high performance and robust network security

The SP5000 series is an HMI that provides information quickly and efficiently, and promotes "smartification" of your factories

Size: 7 Wide | 10" Wide | 10" | 12" Wide | 12" | 15" Wide | 15" | 19" Wide

I/F: COM | LAN | USB | SD | CFast | DVI-D

GP-Pro EX

Premium Display or Advance Display

Use handwritten memos for task handover

Open Box

Run Windows OS

Third Parties application

Improve Performance

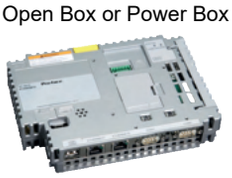
Network Segmentation

All SP5000 series have two ethernet ports, can support IT & OT network for network security.

Easy replacement without special tools, knowledge and programming software.

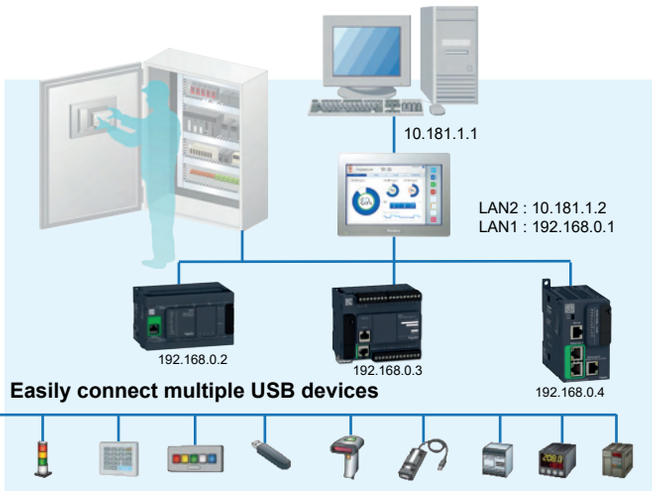
Detachable CPU

Open Box or Power Box



CFast/ SD Card Slot

Set up screens by simply inserting a CFast (Open Box) or SD card (Power Box). No need for a separate PC.



For more information, please log on to https://www.scigate.com.sg

Basic HMI + PLC
22m Hole Mounting

Pro-face™
by Schneider Electric

LTM4000 Series

Flexible

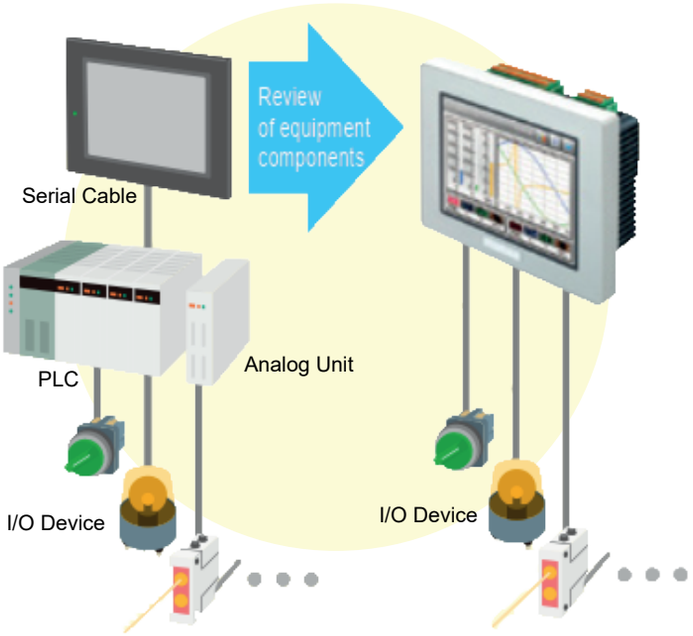
Hybrid display with control function
Since the release of the world's first controller with display (CGP model) in 1996, our products have gained a reputation for enabling customers to save space as well as equipment costs.

Size	3.5”	5.7”				
I/F	COM	LAN	USB	DIO	AIO	CANopen

GP-Pro EX

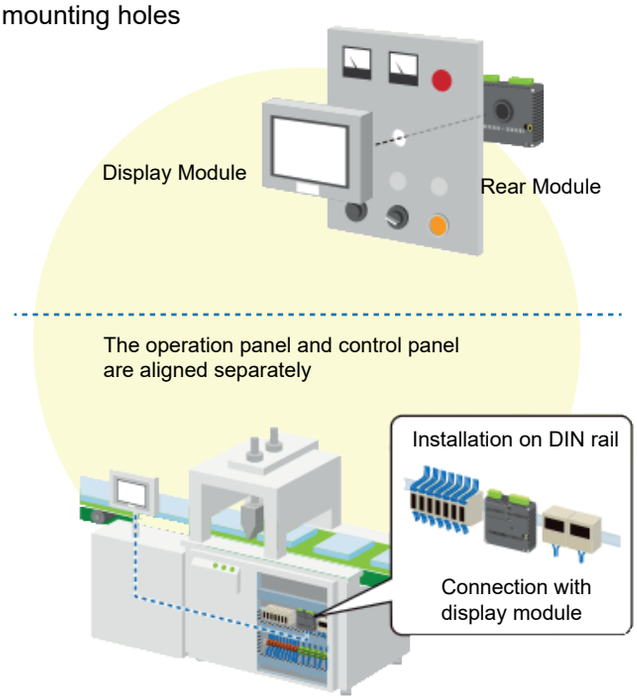
Simpler design with built in PLC

Connectivity with a range of devices



Easy to create control panels

Easily retrofittable, requiring only 22φ circular mounting holes



LT4000M Series

DIO/AIO	Built-in DIO: Max. 20 inputs (includes 2 fast inputs), Max. 10 outputs, Max. 2 fast outputs Built-in AIO: Max. 2 inputs, Max. 2 outputs, Max. 2 temperature inputs	Sensor, Motor, Lamp, Inverter, Switch, and etc...
CANopen (Master)	CANopen supported as Master: Max. 63 CANopen slave devices	Modicon TM3 Module / General CANopen devices
Ethernet Serial	Ethernet port and SIO (RS-232C / RS422 / RS485) port integrated	Actuator, Robot, Inverter, Motion Controller, PLC, etc...
USB	USB Type A available	EZ Series / USB Devices

*For more information, please log on to https://www.scigate.com.sg

Pro-face™
by Schneider Electric

Entry HMI

ET6000 Series

Good enough

Enough visualization

Designed with simple, common application and cost effective in mind.

Cost effective!

Wide	7”	10”	12”	15”
I/F	COM	LAN	USB	

GP-Pro EX

Smooth Operation

12” wide and 15” wide make it easier machine operation because of all information at a glance.

Best in class Visualization

Right enough memory size for more images to create nice looking screens

High resolution and more colors

Display : 16M colors
Resolution : 1,366 x 768, 1,280 x 800, 1,024 x 600, 800 x 480

Connect with various devices

ET6000

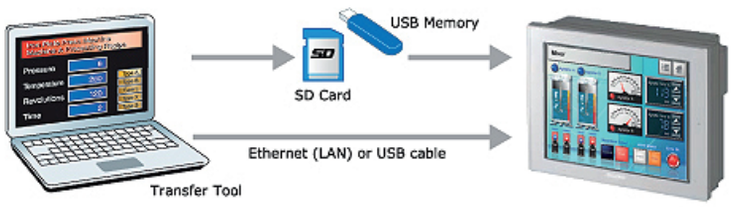
Ethernet | Serial | USB | USB

For Operation | For Maintenance

GP4000 Series

Size	5.7	7” Wide	7.5”	10.4”	12.1”
I/F	COM	LAN	USB	SD	Expansion unit (Video unit)

Advanced HMI



Download project file using USB flash memory or SD card

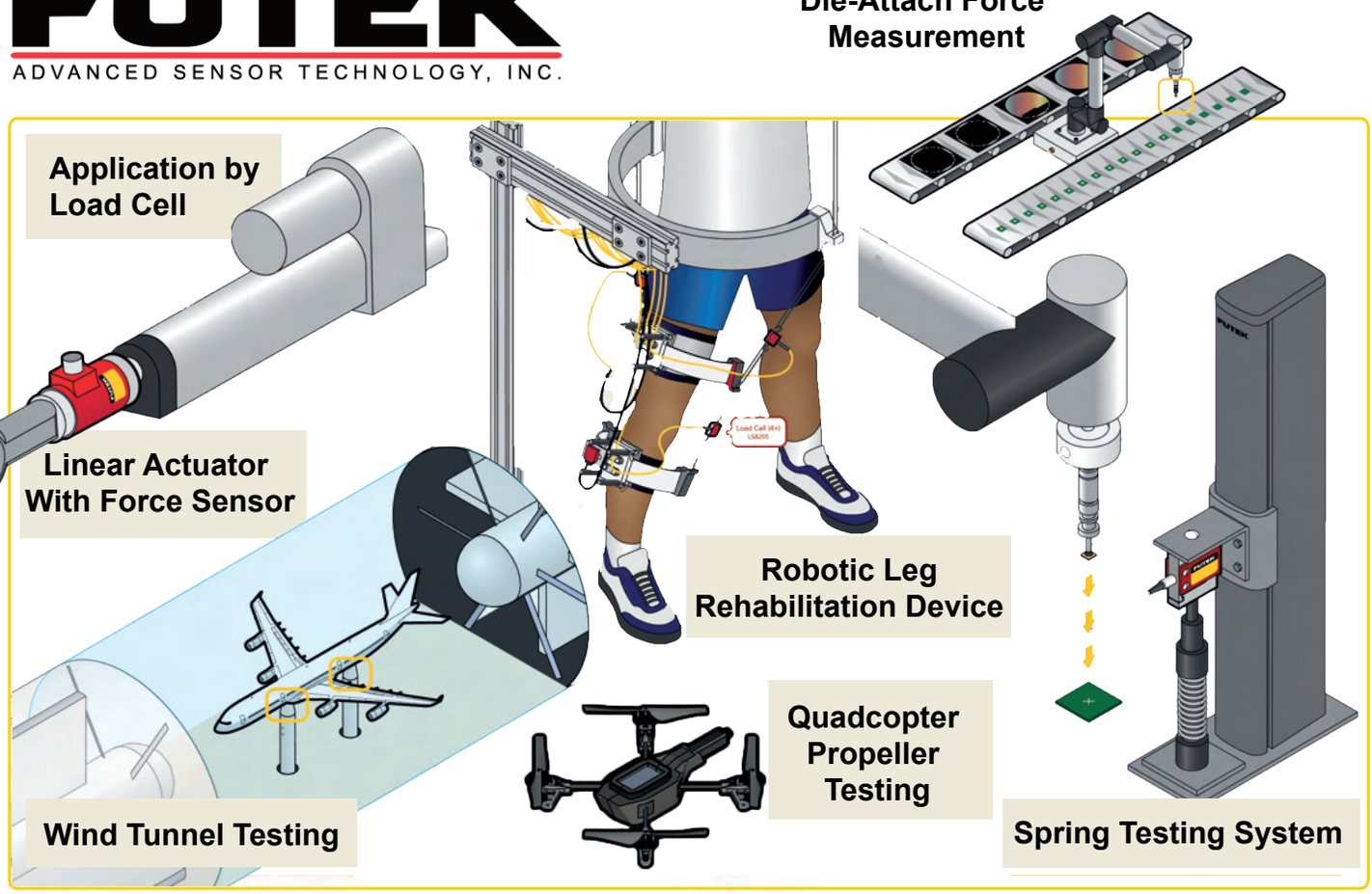
The data transfer tool can be downloaded for free from the Web

Pro-face Standard HMI, GP4000 Series flexibly satisfies customers' needs for many years.

For more information, please log on to https://www.scigate.com.sg

FUTEK

ADVANCED SENSOR TECHNOLOGY, INC.



Miniature S-Beam Jr. Load Cell 2.0 (LSB205)

Introducing the new LSB205 Miniature S-Beam Jr. Load Cell with TEDS. Capable of measuring both tension and compression froces from 1 to 100 lbs. This impressive load cell features an improved fatigue life and off center loading capabilities due to its construction with heat-treated stainless steel. The miniature frame includes an integrated TEDSchip and PT-1000 temperature sensor. With exceptional overload protection, this model is very adaptable for various industry applications.

LOAD CELLS • TORQUE SENSORS • MULTI-AXIS SENSORS

LOAD CELL

S-Beam Series

In-line Series

Load Button Series

Thru-Hole Series

Torque And Thrust Biaxial Sensor

Miniature Series

Canister Series

OEM Solutions

- Working with USB Output
- Working with Handheld
- Working with Panel Mount
- Data logging
- Live graphing
- 16 channels
- Math (fx)

*For more information, please log on to http://www.scigate.com.sg

ANSI Z540-1 | ISO 17025 | ISO 9001 | ISO 13485 | U.S. Manufacturer

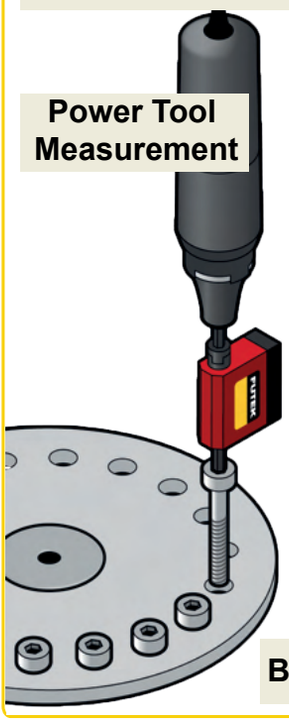
FUTEK

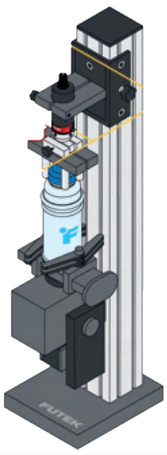
ADVANCED SENSOR TECHNOLOGY, INC.

Application by Torque Sensor

Power Tool Measurement

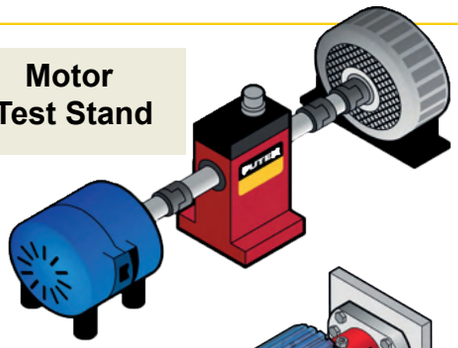
Miniature Torque Screwdriver

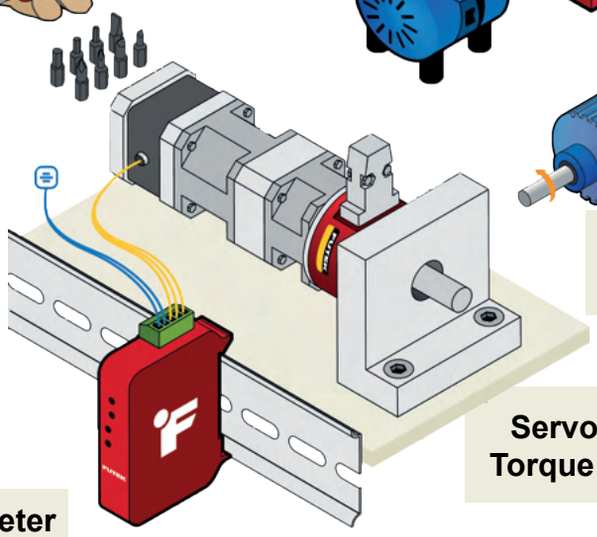




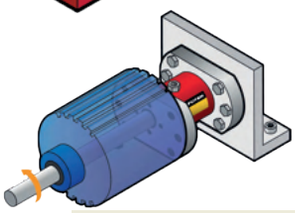
Bottle Cap Torque Meter

Motor Test Stand





Servo Motor Torque Control



Torque/Motor Test Stand

TORQUE SENSORS

Reaction Series

Rotary Shaft-to-shaft

Rotary Hex

Rotary Drive

Rotary Series

MULTI-AXIS SENSORS

Stick Shift Load Cell

Triaxial Load Cell

Low Profile Thrust and Moment Load cell

Biaxial Load Cell

INSTRUMENTS

IAA Series Amplifier

USB Solution
32 Bit Digital Resolutions,
38,400 Sample per Seconds

Amplifier with Digital and Analog Output

IHH500

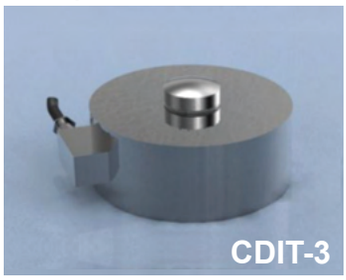
IPM650

High Resolution Display

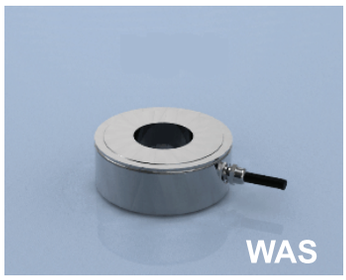
*For more information, please log on to http://www.scigate.com.sg

LCM SYSTEMS
Solutions in Load Cell Technology

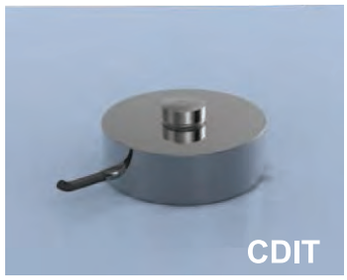
Compression Load Cell



Low profile compression load cell
- Small physical size
- Stainless steel
- 100kg to 200te
- IP68



Through-hole load cell
- Force washer
- Stainless steel
- 12.5kN to 540kN
- IP66



Low profile compression load cell
- Small physical size
- Stainless steel
- 50kg to 5te
- IP67

Column type load cell
- High capacity
- Stainless steel
- 2te to 1000te
- IP67

Tension and Compression Load Cell

Stud type load cell
- Compact design
- Stainless steel
- 100N to 50kN
- IP65

S type load cell
- Fully welded construction
- Stainless steel
- 250kg to 20te
- IP68

S type load cell
- High accuracy
- Alloy steel
- 1500kg to 5000kg
- IP67

Low profile pancake load cell
- Stainless steel
- 5kN to 2000kN
- IP68

Column load cell
- Female and male threads
- Stainless steel
- 1te to 150te
- IP66/67

Beam Load Cells

Stud type load cell
- Compression design
- Stainless steel
- 10kg to 500kg
- IP68

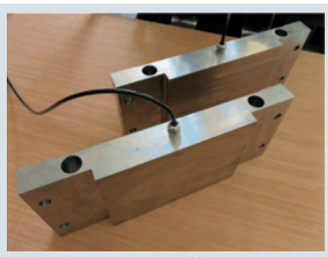
Shear beam load cell
- Stainless steel
- 500lbs to 10,000lbs
- IP68
- Unique blind loading hole

Various Custom Load Cells Solutions

4.75te Load Shackles for Subsea Research (4500m)

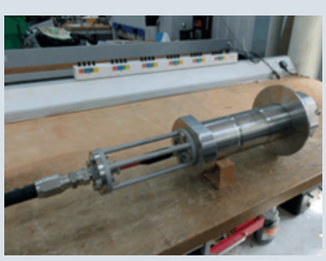
500te Wireless Compression Load Cell

ATEX/IECEx Tension & Compression Load Cell for Oil Well Application



20te Beam Load Cells for Dump Truck

1888te Dual Bridge/ Bi-Directional Load Pin



200te Load Pin for Calm Buoy Mooring Line Monitoring

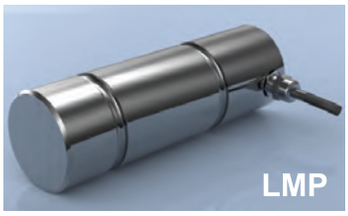
17te Submersible (30m) Data Logging Load Link

42te Wireless Load Pin

**For more information, please log on to* *http://www.scigate.com.sg*

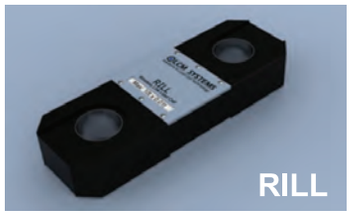
ATEX load cells, load pins and load shackles

Tension Load Cell



Standard Load Pins
- 500kg to 1500te
- Stainless steel
- IP67
- Simple to install

Telemetry load link
- Stainless steel
- 5te to 100te
- IP67 sealed
- Supplied with transit case



Telemetry load link
- Lightweight aluminum
- 1te to 300te
- IP67 sealed
- Supplied with carry case

Shackle/Clevis Load Pins
- 1te to 1500te
- Stainless steel
- IP67
- Special versions available

Wire and wireless shackle load cell
- 1te to 1000te
- High tensile carbon steel
- IP67
- Submersible versions available

Wireless Handheld Display

Wireless Range Extender to 1.6km

Wireless Modbus Gateway

Wireless Large Format Display

Wireless Tablet Display

Wireless Shackle

Wireless Load Link

Instrumentation

ICA - 4-20mA, ±10V, 0-10V, 0-5V

DCELL - RS485 Modbus

DSCUSB - USB

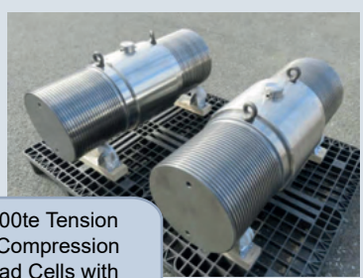
SGA - 4-20mA or 0-20mA, ±10V, ±5V, 0-10V, 0-5V

PMD - Display : Analog output
Alarm output
Signal output

TR150 - Digital Display

T24 - Wireless PortableDisplay

Various Custom Load Cells Solutions

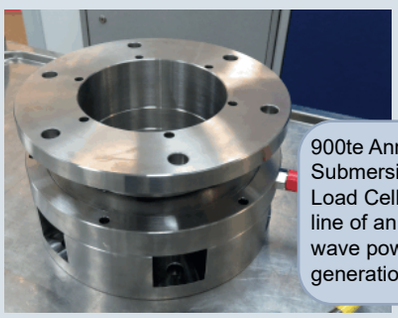


2000te Tension & Compression Load Cells with accuracy of 0.08%

5.15te Y Load Links for Ship Deck Crane

225te Annular Load Cell for Bridge Structural Monitoring

750 / 200te High Accuracy Compression Load Cells with 0.15% accuracy



900te Annular Submersible (80m) Load Cell for mooring line of an offshore wave power generation system

12te Stainless Steel Wireless Load Links

For more information, please log on to http://www.scigate.com.sg

PAVONESYSTEMS

Founded in 1963 our company went through all levels of technological developments.Today we provide integrated solutions for weighing, process control and measurement. Our wide range of products and systems, including those developed internally and worldwide traded, guarantees every kind of weighing and measurement project for all industrial applications: steel mill, metallurgy, paints, tanneries, concrete mill, paper mill,glass industry, pharmaceutical, chemical, petrochemical, food & beverage and packaging.

DAT 1400

- Resolution: 24Bits ADC
- Acquisition Frequency: 1KHz
- Data Logger (Option)
- Fieldbus: Profinet, EtherCAT, Ethernet IP, Ethernet.

MCT 1302

- Touch screen weight indicator
- Perfect for static weighing and loading-unloading and multi-component dosage
- Programmable function

UWT 6008

- Support 8 Load Cells
- Monitor all load cells and generate alarms due to excessive load cell signal drift, loss of connections, failure of load cells, unbalanced weight distribution.
- Emulative control allows the continuity of work of the weighing system even in case of failure on one of the load cells, until the replacement of the same.
- Compensation algorithm to equalize legs angles.

TESTER 1008

- Four Channels Weighing Indicator
- Calibrator / Simulator Load Cells

CGS4-C

Junction Box

MH

- Adjustable radial and tangential mounting
- Allow normal expansion and contraction tank

MKX

- Adjustable radial and tangential mounting
- Allow normal expansion and contraction of tank
- Replace load cell without external jack
- Height adjustment

Load Foot

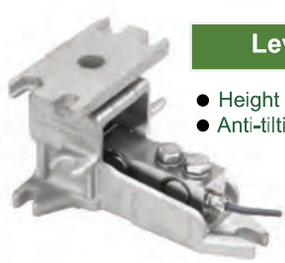
- Rubber base
- Swivelling
- Height adjustment

DE

- Anti-tilting Load Foot
- Replace load cell without external jack

Levermount

- Height adjustment
- Anti-tilting



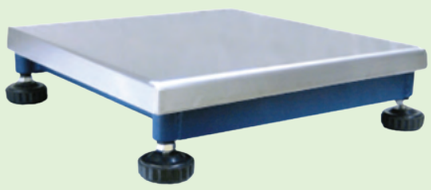
**For more information, please log on to http://www.scigate.com.sg*

MC315 Weighing Indicator

- 21 key keyboard alphanumeric keypad
- 6-digit display 20mm height, 8 status LED
- Housing material stainless steel
- Power up to 4 load cells
- Supply AC100~250V
- Table-top, wall-mount or column mount with bracket
- 2 digital input, 6 digital output, RS485 modbus RTU

PM Platform

- Single off-centre load cell 300kg
- Support 800x800mm



Off-Centre Load Cell

Low profile off-centre load cell is high performance single point load cell.
There are insensitive to off-centre loads or moments, ideal for bench platform.

PS019

Capacity: 15~400kg
Size: 800x800mm max.

PS014

Capacity: 300~3000g
Size: 200x200mm max.

PSZL

Capacity: 1&2 tonne
Size: 1200x1200mm

PSTA2

Capacity: 6~40kg

Silo Tank

Belt Weighing and Feeding

Dosing and Filling Machine

ATEX Solutions

Wall Mount DAT S 1400

Floor Standing MCT S 1302

Load Cell DDR

EXD E 70/2

*For more information, please log on to http://www.scigate.com.sg

CONTROL TECHNIQUES™

COMMANDER C
LOW VOLTAGE AC DRIVES - 0.25 kW to 132 kW

The General Purpose Drive

Commander C200
0.25 kW - 132 kW (0.33 hp to 200 hp)
100 V | 200 V | 400 V | 575 V | 690 V

The drive for a broad range of general applications.

Commander C300

Commander C300
0.25 kW - 132 kW (0.33 hp to 200 hp)
100 V | 200 V | 400 V | 575 V | 690 V

The drive for a broad range of general applications requiring STO, certified to SIL3/PLe safety rating and compliant with EN/IEC 61800-5-2.

Key Highlights
Simple, reliable motor control

- Straightforward installation and commissioning
- Set just 4 parameters to get your drive started
- Up to 180% overload for high torque applications
- Equipped with the latest energy saving features
- Dual Safe Torque Off (STO)
- Plug-in options for advanced control
- On board PLC
- Wide availability and outstanding service

QR Code for Easy Access to Support Documents

Easy motor pairing and performance control

- V/Hz for advanced performance
  - 100% torque available to 1 Hz
  - Slip compensation
  - Square law V/F mode
  - Dynamic V/F mode
  - Auto tune (stationary and rotating)
- Open loop vector
- Fixed boost by default for easy set-up
  - Multi-motor control
- Enhanced open loop RFC
  - Closed current loop for greater stability
  - Auto tuning (stationary and rotating)

Robust and reliable design

- PCBs conformal coated for resilience to harsh environments
- Patented air flow system cools and protects components
- Voltage tolerance for smooth operation during variable supply
- Intelligent 3 speed replaceable fan with failure detection
- Trip avoidance features take action instead of tripping out:
  - Load shedding reduces speed at current limits
  - Ride-Through momentary power interruptions and voltage sags prevent trips out
- High overload capability - 180% for 3s (RFC-A mode) or 150% for 60s (Open loop mode)
- Ingress protection: IP21-UL open class (NEMA 1)

More control, less cost

- On board PLC
- Built-in independent PID control

Energy saving

- Dynamic V/Hz - improves efficiency by reducing motor voltage during low demand
- 98% efficient - only 2% of energy is lost during the conversion process
- Low power standby mode - drives can be idle for significant periods, saving energy
- Automatic 3-speed cooling fan - keeps energy usage & acoustics to a minimum by intelligently responding to load and the environment
- Square Law V/F mode - optimized for quadratic loads like pumps & fans to reduce motor losses

Onboard I/O
- 3 x Analog I/O
- 5 x Digital I/O
- 1 x Relay
- 2 X STO (C300 only)

SI-I/O Module
- 4 x Digital I/O
- 3 x Analog inputs (default) / Digital inputs
- 1 x Digital input
- 2 x Relays

Fixed LED

Remote Keypad RTC

IP66 Remote Keypad (LCD)

RS485 Cable

Operator Interface

AI-Backup Adaptor

AI-Smart Adaptor

AI-485 24V Adaptor

Communications Modules

AI-485 | SI-CANopen | SI-DeviceNet | SI-PROFINET | SI-PROFIBUS | SI-EtherCAT | SI-Ethernet

*For more information, please log on to http://www.scigate.com.sg

UNIDRIVE M700

0.75 kW - 2.8 MW Heavy Duty - 200 V | 400 V | 575 V | 690 V

CONTROL TECHNIQUES

Typical applications

Speed & position control for gearing & ratio control, winding, web handling, cutting, test stands, printing, packaging machines, textiles, woodworking, tire manufacturing and hoists.

Key Highlights

Class leading performance with onboard real-time Ethernet

Optimize system performance
- High bandwidth motor control 3Khz
- Flexible speed & position feedback
- Maximize throughput
- Onboard Advanced Motion Controller
- 1.5 axes control
- Flexible control systems
- Integrate directly with safety systems
- Onboard STO
- SI-Safety for safe motion

Flexible communications
- Synchronized RTMoE comms
- Fieldbus communications: PROFINET, Ethernet/IP, Modbus TCP/IP & EtherCAT
- Onboard IT & HTTP web page comms
- Conform to safety standards
- Ideal for centralized & decentralized control
- MCi module advanced system control capability
- Onboard PLC for logic programs
- IEC61131-3 programming
- Onboard real-time Ethernet (IEEE 1588 V2 PTP)

More Advanced Control Mode

- Open loop permanent magnet motor control (RFC-S)
- Closed loop Rotor Flux Control for induction motors (RFC-A)

Motor Position Feedback Modules:
- SI-Encoder

- SI-Universal Encoder

Onboard I/O
- 5 x Analog I/O
- 8 x Digital I/O (including 2 x high speed I/O [250 µs])
- 1 x Relay Output
- 1 X STO

SI-I/O Module
- 4 x Digital I/O
- 3 x Analog inputs (default) / Digital inputs
- 1 x Digital input
- 2 x Relays

Remote I/O

"Engineers can connect to the drive from any web-enabled device"

Industrial Internet of Things

1. Operational efficiency
2. Smart machine optimisation
3. Mass customization
4. Quality control
5. Remote diagnostics and monitoring
6. Predictive maintenance

Applications Modules

SI-Applications (M700)
- 2nd processor module, allows SyPTPro programs to be re-compiled for M700

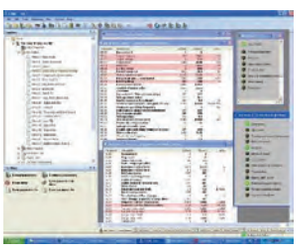
MCi200 (M600/M700, E200/E300)
- 2nd processor provides advanced machine control via Machine Control Studio

MCi210 (M600/M700, E200/E300)
- MCi200 + dual port Ethernet interface on processor and additional I/O

Commissioning and monitoring software

Unidrive M Connect - Commissioning tool

Based on Control Techniques' 25 years' experience, Unidrive M Connect is our latest drive configuration tool for commissioning, optimizing and monitoring drive/system performance.



Automation and motion programming software

Machine Control Studio - Programming tool

IEC 61131-3 motion and automation programming
- Structured Text (ST)
- Function Block Diagram (FBD)
- Structured Function Chart (SFC)
- Ladder Diagram (LD)
- Instruction List (IL)
- Continuous Function Chart (CFC)

IntelliSense:
- Consistent & robust programs
- Speed up software development

Access to open-source community function blocks

Support for customers' libraries:
- On-line monitoring of program variables

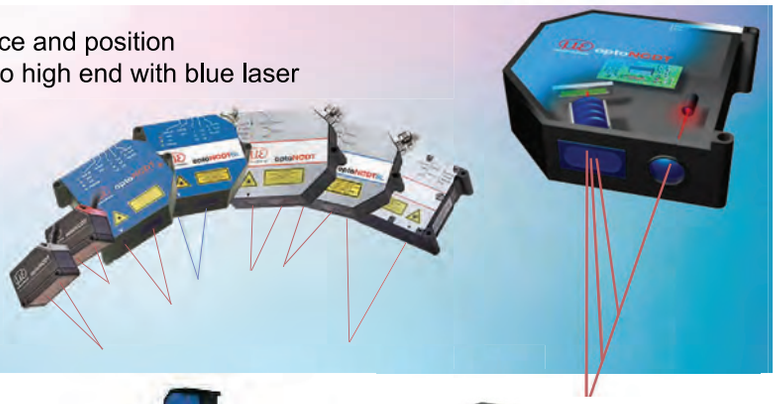
**For more information, please log on to* http://www.scigate.com.sg

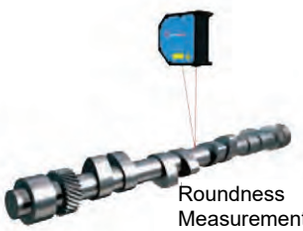
MICRO-EPSILON

More Precision. Precise . Reliable

Triangulation Laser sensors for displacement, distance and position

- Worldwide largest range of sensors from low cost to high end with blue laser
- Measuring range from 2 to 1000mm
- Fast measurements up to 49kHz
- Compact design with integrated controller
- Non-contact and wear-free
- Large distance from the measurement object
- Small light spot for smallest parts
- Precise measurement results with high dynamics
- Almost independent of surface properties

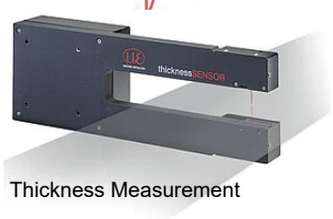




Roundness Measurement

Bend Lead Detection

A-RTSC (Advanced Real Time Surface Compensation)

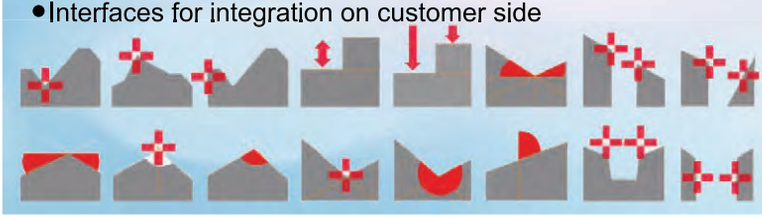


Thickness Measurement

Series	Measuring Range (mm)	Linearity ±% FSO	Repeatability µm	Measuring Rate (kHz)	Output	Functions
optoNCDT1220 optoNCDT1320	10, 25, 50, 100, 200, 500	0.1	1	2	4~20mA, RS422	Compact and high speed
				4	4~20mA, RS422 / EtherCAT / PROFINET / EtherNet/IP	
optoNCDT1420 optoNCDT1420 CL1 optoNCDT1420LL	10, 25, 50, 100, 200, 500 10, 25, 50	0.08	0.5	8		Smart, fast and precise
optoNCDT1900 optoNCDT1900LL	2, 6, 10, 25, 50, 100, 200, 500 2, 6, 10, 25, 50	0.02	0.1	10		Innovative laser sensor for advanced automation
optoNCDT2300 optoNCDT2300BL optoNCDT2300LL optoNCDT2300-2DR optoNCDT2310	2, 6, 10, 25, 50, 100, 200, 300 2, 5, 10, 50 2 10, 20, 40, 50	0.02	0.0015	49		High speed for dynamic application
optoNCDT1750BL	20, 200, 500, 750	0.08	0.8	7.5		Blue laser, good for metal and organic materials
optoNCDT1750-DR	2, 10, 20	0.08	0.1	7.5		
optoNCDT1710-50	50	0.1	7.5	2.5		
optoNCDT1710BL	50, 1000	0.1	7.5	2.5		
optoNCDT1760	1000	0.1	0.1	7.5		
optoNCDT1910	500, 750	0.07	0.02	9.5		
thicknessSENSOR	10, 25	10~40 µm	-	4	4~20mA, 0~5V / 0~10V / RS422 / Ethernet	Non-contact thickness measurements of strip and plate material

2D/3D Laser scanners for profile measurement

- High accuracy and profile frequency
- High performance signal processor
- Compact design with integrated controller
- Interfaces for integration on customer side



Weld Seam Position

Width Control

Windshield Profile

Alignment of Phone Cover

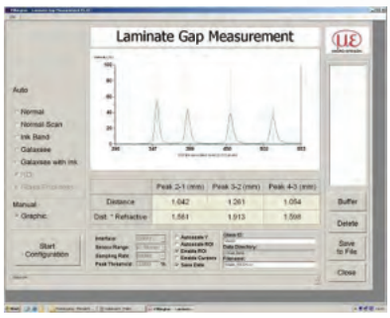
IC Coplanarity

**For more information, please log on to* *http://www.scigate.com.sg*

MICRO-EPSILON

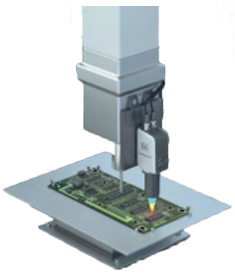
Confocal chromatic sensors for displacement, position and thickness

- Tiny, constant measuring spot
- Manometer resolution
- One-sided thickness measurement
- High-speed measurements with sub-micrometer accuracy
- Measuring range from 0.1~30mm
- Resolution down to 0.016µm

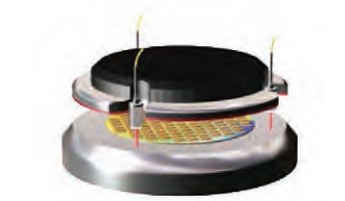


Multi-Peak Software

Glass Thickness



Monitoring Electronic Component

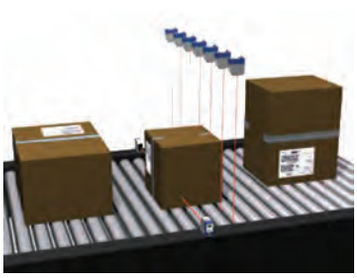


Parallelism of Lapping

optoNCDT ILR - Non-contact laser distance sensors

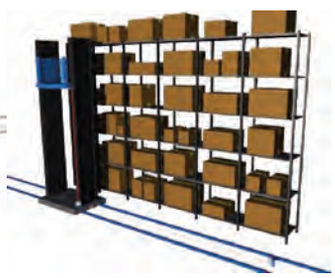
- Extremely large measuring range from 0.5m to 270m
- Integrated heating option for outdoor environments
- Robust and compact design
- Outstanding repeatability and response time
- Use with and without reflector

Series	Measuring Range mm	Linearity	Repeatability	Response Time	Output	Functions
optoNCDT ILR1030/1031	No reflector 0.2 - 15 With reflector 0.2 – 50	± 25 mm	5 mm	0.01 ms ms	4~20mA	Compact laser distance sensors
optoNCDT ILR2250-100	Measuring range 0.05 – 150	± 1 mm	0.5 mm	0.05	4~20mA RS422 / USB / PROFINET / EtherNet/IP / IO-Link	Precise laser distance sensors
optoNCDT ILR1171-125	Measuring range 0.5 - 270	± 60 mm	25 mm	0.025 ms	4~20mA RS232/ RS422	Laser distance sensors



Classification and sorting

Robot Car



Storage Rack Positioning

Container Positioning

**For more information, please log on to* *http://www.scigate.com.sg*

MICRO-EPSILON

More Precision. Precise . Reliable

USB thermal imagers
- Non-contact measurement
- Temperature range from -20°C to 1900°C
- Real-time thermography
- Excellent thermal sensitivity and resolution
- Compact design with USB interface

Model	Description	Temperature	System Accuracy
TIM 160S	Miniaturized thermal imaging camera with USB interface	-20°C to 900°C	±2°C to 2%
TIM QVGA TIM QVGA-HD	Thermal imaging camera with high resolution and sensitivity	-20°C to 900°C	±2°C to 2%
TIM VGA	Worldwide smallest VGA thermal imaging camera	-20°C to 900°C	±2°C to 2%
TIM M1	Thermal imaging camera for hot metal surface	-45°C to 1800°C	±1% of reading
TIM M1 TIM M-08	Thermal imaging camera with blocking filter and cooling ensure for hot metal surfaces	-45°C to 1800°C	±1% of reading

Non-contact IR temperature sensors
- Temperature ranges from -50°C to 2200°C
- Sensors for the metal industry
- Sensors for the glass industry
- High-speed model
- Also suitable for the Ex area

thermoMETER
- Infrared pyrometer for non-contact temperature measurement
- Temperature ranges from -50 °C to 1600 °C
- Compact design for non-contact temperature measurement without influencing the object
- Monitoring of hot, fast moving or difficult-to-access objects
- Robust, wear-free and reliable

thermoMETER CTM2/M3
- Version for metal production, temperature ranges from 50°C to 1600°C

thermoMETER CTM4
- Fast measurement of metals and non-metals due to large, short-wave spectral range

thermoMETER CThot
- For difficult ambient conditions up to 250°C ambient temperature without cooling

thermoMETER CS / CSmicro / CSLaser
- Compact, miniature and low cost
- Temperature ranges from -50 °C to 1030 °C
- Robust, silicon-coated lens
- Integrated controller
- Scalable analog output: 0 - 10V / 0 - 5V
- Ideal for OEM, also available as two-wire version and high-resolution models

thermoMETER CT / CTfast
- Extremely low cost and high accuracy
- Temperature ranges from -50 °C to 975 °C
- Short response times from 3 ms
- Up to 180 °C ambient temperature without cooling

thermoMETER CTLaser / CTLaserFAST
- Precise pyrometer with laser sighting
- Temperature ranges from -50 °C to 975 °C
- Infrared sensor heads with optical resolution up to 75:1, from a measurement spot of 0.9 mm
- Double laser marks the exact spot location from a spot size of 1 mm
- Response time from 120 ms

thermoMETER TIM 8
- Intelligent spotfinder pyrometer
- Temperature ranges from -20°C to 900°C
- Robust and compact pyrometer with motorized focus
- Excellent optical resolution
- Autonomous operation with automatic spotfinder and direct analog output
- For temperature measurements in machine building and in automation

*For more information, please log on to http://www.scigate.com.sg

Sensors for displacement, distance, position, dimension, colour and temperature

MICRO-EPSILON

Eddy current displacement sensors for displacement and position

- High resolution and accuracy
- Fast measurements up to 100kHz (-3dB)
- Insensitive to dirt, pressure and oil
- Ideal alternative to inductive displacement sensors
- Customized sensor design

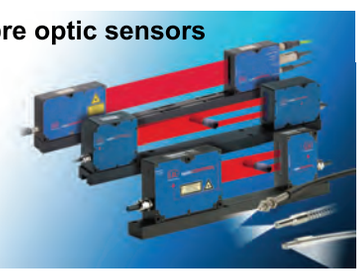
Capacitive sensors for displacement and position

- Non-contact, wear-free measurement
- Unmatched accuracy and stability
- High bandwidth for fast measurements
- Temperature range -270°C to +200°C
- Modern controller technology

Colour sensors & LED analysers

- Colour recognition, colour testing and colour measurement
- Simple quality control
- Easy and fast commissioning
- Sensors for numerous fields of applications
- Measurement accuracies ΔE to 0.08

Optical micrometer and fibre optic sensors



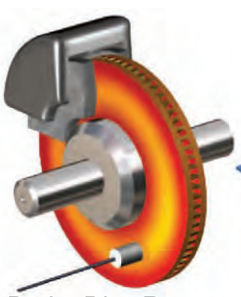
- Highest resolution and accuracy
- Wear-free
- Ideal for process control
- Measurement of edge/position, diameter, gap segment

Draw-wire displacement Sensors

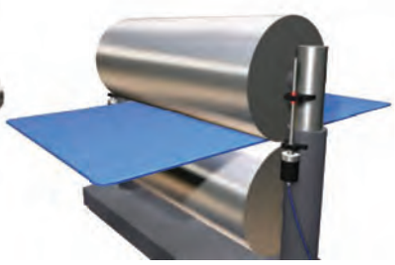
- Measuring ranges up to 50,000mm
- Resolution towards infinity
- Easy, fast and flexible mounting
- High operational safety & long service life
- Analog and digital outputs

Magneto-inductive displacement sensors

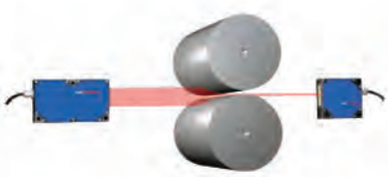
- Large measuring range
- Analogue, digital, PWM outputs
- High measuring rate
- High resolution
- Compact sensor design
- High volume OEM custom solutions



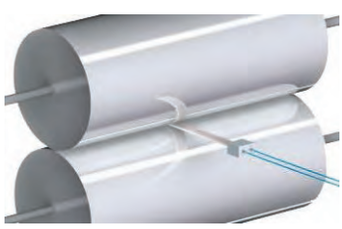
Brake Disc Runout



Roller Gap



Thickness Control



Roller Gap

Position of Bus Lift

Valve Positioning

Wind Turbine

Lift Position

Crane Outrigger Position

Train Door Position

Wire Forklift

**For more information, please log on to* http://www.scigate.com.sg

Solartron Metrology
AMETEK®
ULTRA PRECISION TECHNOLOGIES

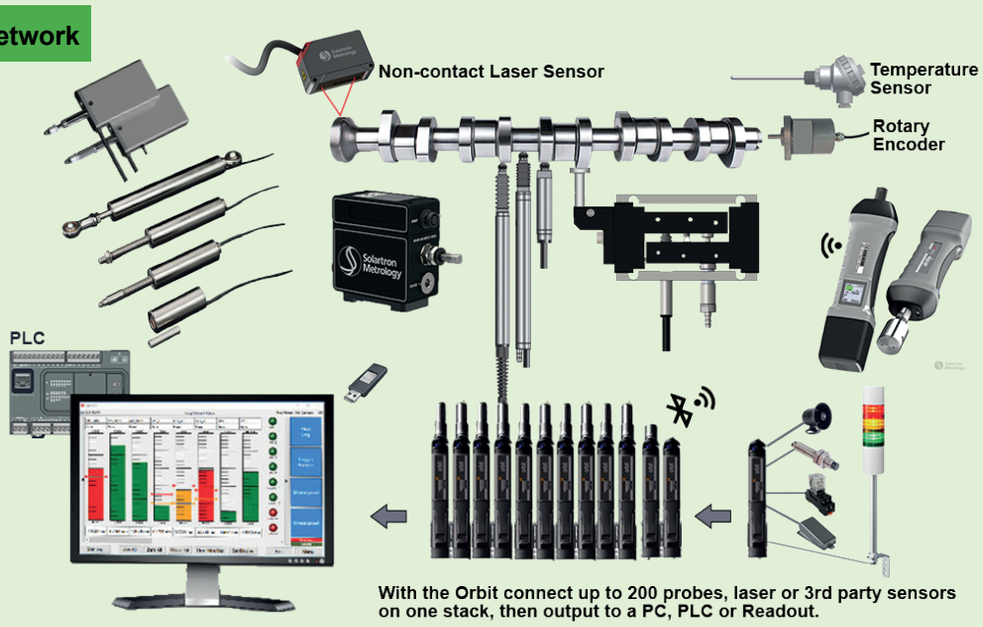
DIGITAL ORBIT NETWORK

DP/S, DP/P	Body Diameter
DT/S, DT/P	Ø3, Ø6, Ø8, Ø9, Ø12
DZ/S	
DW/S, DW/P	Actuation
DP/V	Spring Push
DJ/P	Pneumatic Push
D6J/S, D6J/P	Vacuum Retract
D6S/D6T	
D12P/S, D12P/P	Contact Force
D12P/S, D12P/P	0.03N, 0.18N, 0.5N, 0.7N
D3P/S	

Orbit® Digital Measurement Network

A faster throughput, lower cost, & better data collection than any analog or conventional system with its calibrated probes, multiple gateways, and ability to connect 3rd party sensors

- Ultra flexible network for gauging and linear measurement
- Contact and non-contact measurement
- High speed measurement
- Interfaces to PC and PLC
- Orbit® library based on Microsoft .NET Framework
- Windows® 11 and 10 in 64 bit

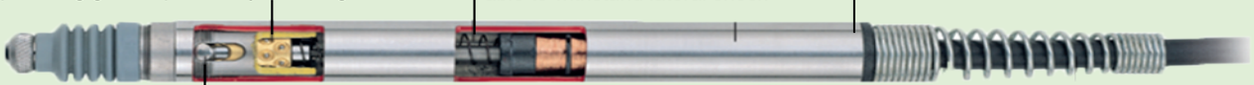


With the Orbit connect up to 200 probes, laser or 3rd party sensors on one stack, then output to a PC, PLC or Readout.

Orbit *A universal truth for long term confidence of reading*

Tight tolerance bearing with carbon/chrome balls providing good repeatability with long life

Titanium core carrier, inert and able to withstand lateral shock



Anti rotation device designed to be strong and provide great repeatability even withprobe tip off centre

All standard transducer cables feature a polyurethane sheath with a foil screen layer for excellent electrical screening. The cable is very flexible.

Conventional Solution

Analog Probe — Amplifier — Analog Input Module — PLC

Compromising:
- ✓Accuracy
- ✓Repeatability
- ✓Resolution

Bearing diameter — PCB — Shaft straightness — Internal diameter — Surface profile — Screw height

*For more information, please log on to http://www.scigate.com.sg

DIGITAL ORBIT NETWORK

Solartron Metrology
AMETEK®
ULTRA PRECISION TECHNOLOGIES

Orbit® ACS - Automation and Control System

Orbit ACS

Go / No Go / Limit

Modbus

1ch

- Support all Solartron Digital Probe
- DC24V Power
- Din Rail mounting
- Programmable discrete I/O (4 inputs, 3 outputs)

2ch

4ch

Orbit Modules & Gateways - Modbus RTU, ProfiNet, EtherNet/IP, EtherCat & CC-Link

PLC

PLC

- Support all Solartron Digital Probe
- DC24V Power
- Din Rail mounting
- Support 150 Orbit Modules
- Cyclic and Explicit Data

Modbus PROFINET EtherNet/IP EtherCAT

Orbit Digital Measurement Network

PC

- Support all Solartron Digital Probe
- Support 150 Orbit Modules
- Interface to 3rd party sensors
- High speed measurements
- Din Rail mounting
- Cyclic and explicit data

- Interfaces to Excel®
- Orbit® Library – based on Microsoft .NET Framework
- Windows® 10, 8.1, 7 and XP in both 64 bit and 32 bit

USB

Ethernet

Bluetooth

RS232

Modbus RTU

Orbit Digital Display Meter

Stand-alone

SI1500

- Support all Solartron Digital Probe
- Support 1 Orbit

SI3500

- Support all Solartron Digital Probe
- Support 2 Orbit Modules

SI5500

- Support all Solartron Digital Probe
- Support 31 Orbit Modules

WiGauge 2

- With LCD readout
- Bluetooth capable
- <0.1 µm resolution
- Display tolerances on the screen

**For more information, please log on to* *http://www.scigate.com.sg*

Delphin Technology

Your competent partner for Standalone data logger,..
Industry 4.0/Internet of Things

Universal Analog Inputs						
Voltage (Strain Gauge Excitation)	±156 mV ~ ±10 V	± 100 / 200 / 500 mV; ± 1 / 2 / 5 / 10 V	±78 mV ~ ±10 V			—
Current	0~20 mA, 4~20 mA		0~20 mA / 4~20 mA / ±20 mA			—
Resistance (Current reference)	0~10 kΩ (100 / 200µA / 1mA)	0~10 kΩ (200µA)	0~60 kΩ			—
Temperature(TC, RTD)	B, C, E, J, K, L, N, R, S, T, PT100, PT1000, NTC	R, K, J, E, PT100, PT1000	J, K, B, N, S PT100, PT1000			—
Analog Outputs	0~12 V / ±12V / 0~20 mA / 4~20 mA 16bits	0~10 V / ± 10 V / 0~20 mA / 4~20 mA / ±20 mA 16bits / 50Hz	4~20 mA / 12bits / 1Hz			—
High Frequency Digital Inputs	50Vdc / 3.5mA / 1 MHz / 64 bits	90Vdc / 3.5mA / 1 MHz / 64 bits	100Vdc / 3.5mA 30KHz / 64 bits			—
Digital Output	50 Vdc / 3A / 10 KHz	30 Vdc / 1A / 10Hz	50 Vdc / 250mA / 10 kHz			—
Input Resolution	24 Bit	18 Bit	24 Bit			—
Sum sampling rate	1KHz	100 KHz	1/3 Hz~680 Hz			—
Galvanic isolation	±400 VDC	500 VDC	±400 VDC			—
Data Memory - Internal (30 million values per GB)	2~14 GB	—	4 / 8 /16 GB	—	—	4 / 8 /16 GB
- External (Backup)	USB, NFS, CIFS, (S)FTP	—	USB, NFS, CIFS, (S)FTP	—	—	USB, NFS, CIFS, (S)FTP
Communication						
Data Service Configurator	LAN / USB / WLAN	LAN / USB	LAN / USB	USB	WLAN	LAN / USB
LAN	✓	✓	✓	—	—	✓
USB Device 2.0			✓			
USB Host 2.0	✓	—	✓	—	—	✓
CANbus 2.0	2	—	—	—	—	—
RS232/485	3	—	via USB extension	—	—	via USB extension
Modbus TCP	✓	—	✓	—	—	✓
Modbus RTU	✓	—	✓	—	—	✓
OPC UA	✓	—	✓	—	—	✓
OPC DA	—	—	✓	—	—	✓
Sensor bus SDI12	✓	—	—	—	—	—
Power Supply	12~24Vdc	9~24Vdc	12~24Vdc 5Vdc (USB mini) Battery 3.7V, 2Ah	5Vdc (USB mini)	12~24Vdc Battery 3.7V, 2Ah	12~24Vdc 5Vdc (USB mini) Battery 3.7V, 2Ah

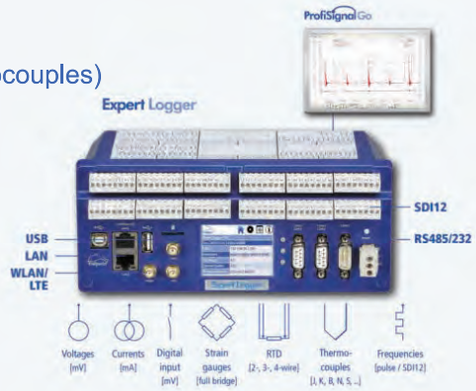
**For more information, please log on to* *http://www.scigate.com.sg*

Your competent partner for measurement systems ranging from standard through to customised complete solutions!

Delphin Technology

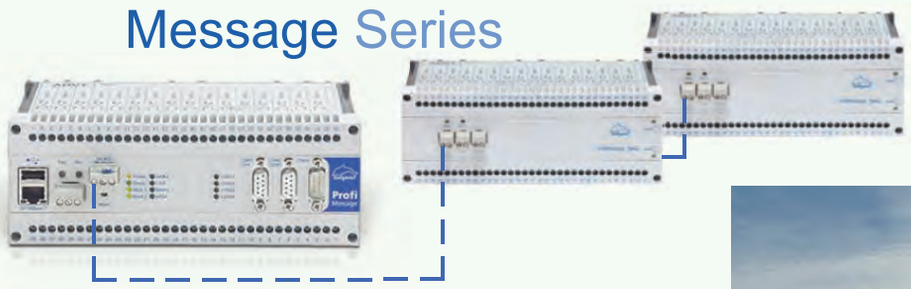
Stand alone and secure data logger!
- Work standalone without computer
- Strong networking capability, remote & wireless viewing
- Universal inputs suitable for any type of sensor (e.g. mA, mV, RTD, thermocouples)
- Quality & high speed input (24 Bits ADC & 1KHz Sampling)

Applications:-
- Traffic census data loggers
- Solar panel data loggers
- Aircraft data loggers
- Temperature data loggers
- Meteorological data loggers
- High-speed data loggers



Monitoring and fault analysis!
- Synchronous acquisition of high-speed analog and digital signals
- Condition monitoring and fault diagnostics within a single device
- No requirement for an on-site PC and easy data read-outs using a USB stick
- Flexible data transmission via Ethernet, USB, Serial and WLAN
- Fast and easy data evaluation using logic analyses and trends

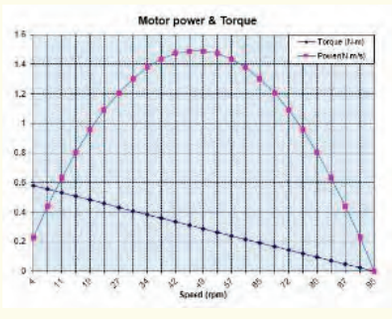
Message Series



Applications:-
- Fault analysis in industrial cranes
- Monitoring of wear in crane systems
- Development of crane maintenance-plans using data analysis
- Monitoring of system symmetries
- Monitoring crane travel and range distances
- Error detection in control and power components
- Maintenance planning for container cranes

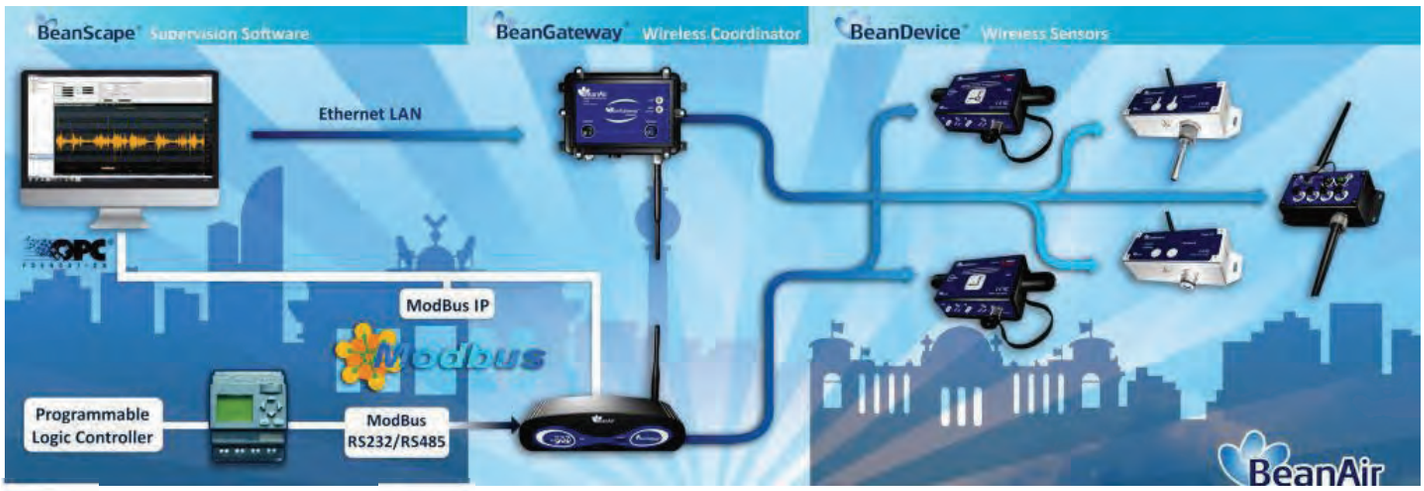
Precision measurement!
- Easy-to-use, automated testing procedures
- Test sample conditioning management, voltage supply, frequency converters and switch matrixes
- Time-synchronised temperatures, pressures, rotations, electrical measurements and torques
- Precision electrical measurement via power measurement units
- Monitoring of threshold values online during the testing procedure

Applications:-
- Cold resistance measurement and extrapolation of winding resistances
- Non-load & rated load testing
- Load curves testing
- Overload trials & locked rotor testing
- Torque-speed characteristic curve
- Testing of voltage series
- Determination of efficiency
- Heat testing

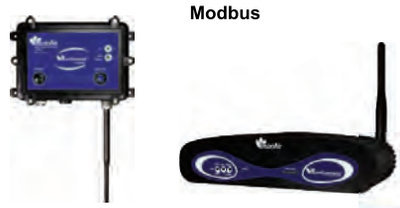


BeanAir 2.4 GHz

Rethinking Sensing Technology



The BeanScape® is a real time WSN supervision and control monitor. It allows the users to monitor and operate in real time BeanAir® WSN. The BeanScape® is also equipped with a smart expert system that allows users to interpret elements such as data acquisition or alarms related to the sensor network.



SmartSensor

AX 3D
Accelerometer

Hi-Inc
Tiltmeter

AX 3DS
Shock Sensor

Inc
Low Cost Tiltmeter

AX 3D Xrange
High Performance
Accelerometer

Hi-Inc Xrange
High Performance
Tiltmeter

ProcessSensor

AN 420
Analog Current Loop
(4-20mA)

AN V
Analog Voltage
(+/- 0V or +/- 10V)

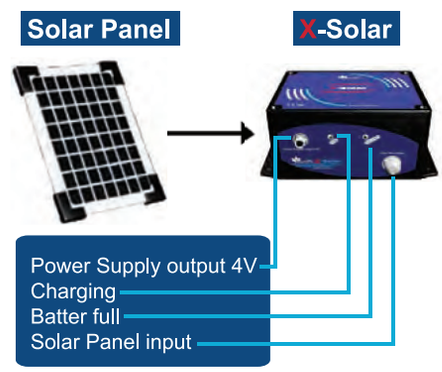
AN mV
Analog Voltage
(+/- 20mV)

EcoSensor

One Tir
IR Temperature

One T
Temperature

One TH
Temperature and
Humidity



Environmental Monitoring

Structural Health Monitoring

Structural Health Monitoring

Test and Measurement

Land Surveying

*For more information, please log on to http://www.scigate.com.sg

AX-3D
Ultra Low Power
Wifi Accelerometer with built-in data logger

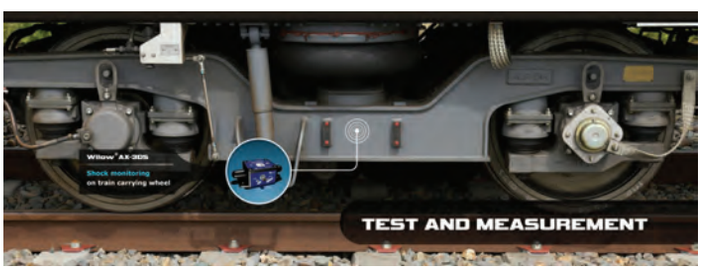
AX-3DS
Ultra Low Power
Wifi Shock Sensor with built-in data logger

Hi-Inc
Ultra Low Power
Wifi Accelerometer with built-in data logger

X-Inc
Ultra Low Power
Wifi Combo Sensors (accelerometer, inclinometer and shock) with built-in data logger

- ULP (Ultra Low Power) Wifi Technology - IEEE 802.11 b/g/n (2.4 Ghz frequency band)
- Rugged aluminum casing Waterproof IP67 | NEMA 6
- Embedded Data Logger: up to 5 million data points (with events dating)
- USB 2.0 for device configuration (including firmware update)
- Smart and flexible power supply, compatible with USB and Solar power sources
- Store and Forward+: Lossless data transmission with hard real-time
- SSD (Smart Shock Detection), WILOW® sensor can wakeup on shock detection (software configurable)
- IIOT Ready: Integrated MQTT data exchange,lightweight and open-source Industrial Internet of Things (IIOT) protocol
- Industrial temperature range -40°C to +65°C
- Onboard SNTP (Simple Net Time Protocol) Client
- Precision Time Protocol over Wifi Network (±30ms of precision)

DIN 4150-3
Standard thru FFT



Environmental Monitoring

Condition Monitoring

Ground Vibration Monitoring

*For more information, please log on to http://www.scigate.com.sg

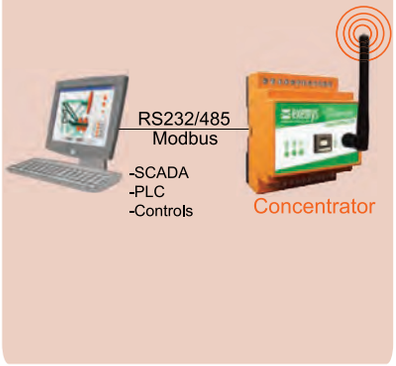
exemys Telemetry and Connectivity

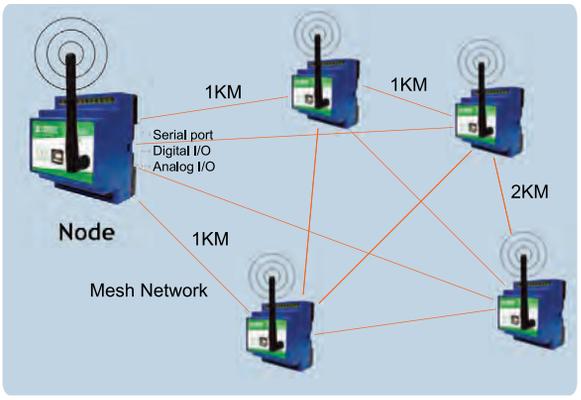
wRemote is a new concept of Wireless Telemetry, based on mesh networking technology. The system was designed for industrial and open field network, where you need to collect remote and disperse information in a reliable and low cost networking solution.

2.4GHz Telemetry • ZigBee Wireless Telemetry

wRemote

ZigBee Wireless Telemetry System
2.4GHz

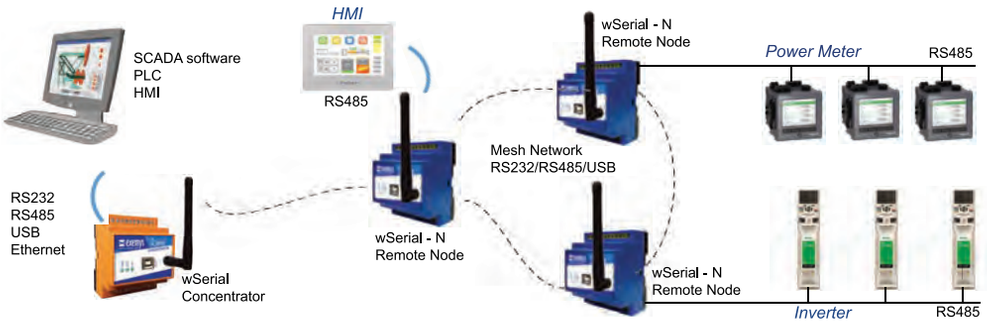




Advantages of Mesh Network

- It is possible to carry messages from one node to another by different paths.
- Each node has its own communications with the others.
- Each node extends the scope of communications.
- It is much safer. If a node fails, another will take over the traffic.

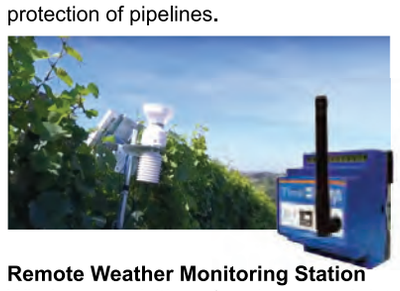
Wireless Radio 2.4GHz Mesh Network Technology wSerial



wSerial is a new concept in Serial Radio, which introduces Mesh Networks technology to achieve not only point to point, but also multiple connections. The system was designed to be a real network of serial ports to industrial facilities where there is a need to gather information from remote and dispersed devices, reliably and inexpensively.

Industrial
Connectivity of the control panels of wind turbines through fiber optic rings.

Water and Sanitation
Wireless acquisition of basic variables measurement from the injection of current rectifiers for the cathodic protection of pipelines.

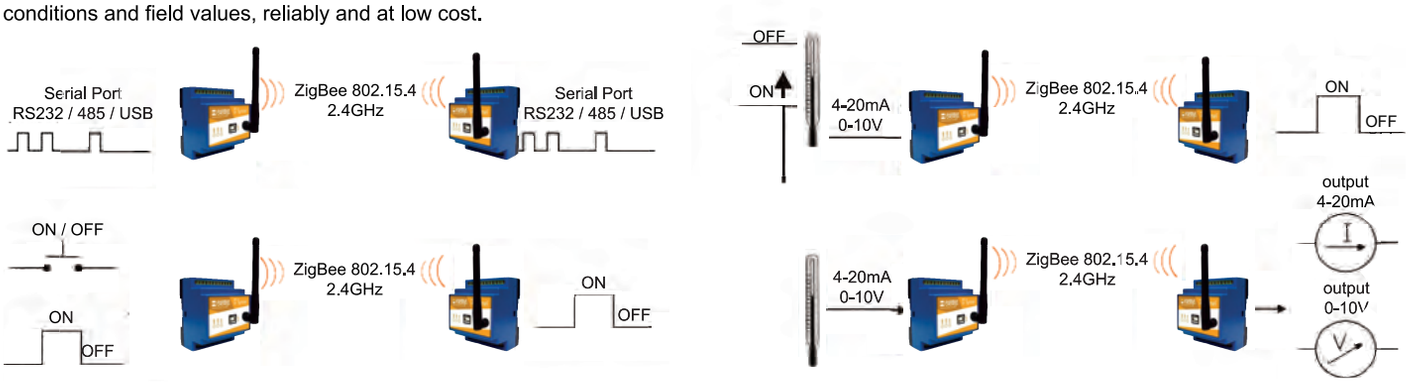


Remote Weather Monitoring Station
Wireless acquisition of environmental data, temperaturre, raindrop and partical counter.

Remote Tank Farm Level Monitoring
Inventory monitoring and control wirelessly.

Wireless Radio 2.4GHz Mesh Network Technology wTunnel

wTunnel
The system was designed to be a true Point to Point Tunnel to reflect conditions and field values, reliably and at low cost.



*For more information, please log on to http://www.scigate.com.sg

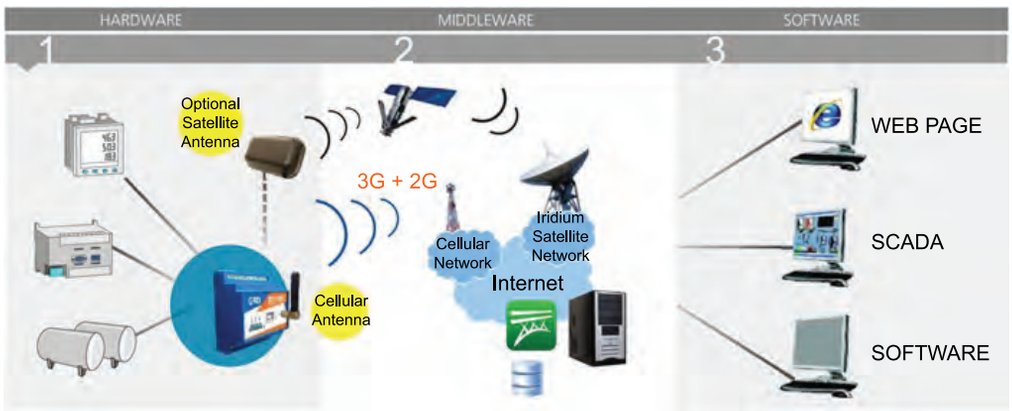
Telemetry Device with 4G + 3G Cellular / Satellite Communication and Programmable Logic

GRD

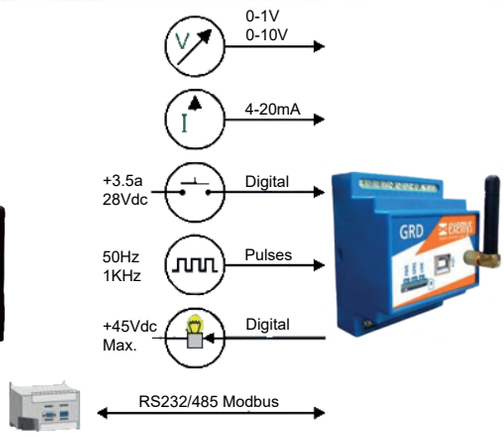
Device for monitoring and controlling with 3G Cellular/Satellite communication and Programmable Logic

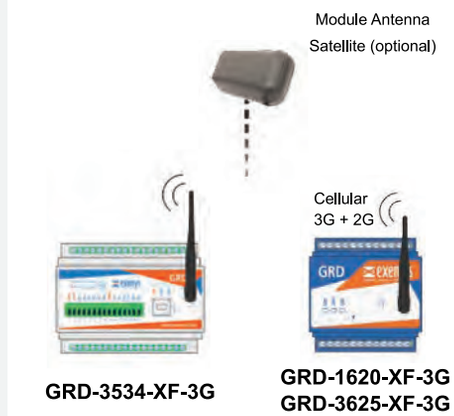
The GRD family of products helps control and supervise any kind of equipment from a distance, be it a control system or process system facilitating and implementation of the remote telemetry system. Additionally it includes the possibility to load test script to perform internal logic

Electric Power
Remote monitoring and control of large size generations.



Oil and Gas
The gas compressors in the wellhead installed and dispersed in remote sites. The telesupervision of the functioning compressors permits improved performance of the machine, increasing its productivity.

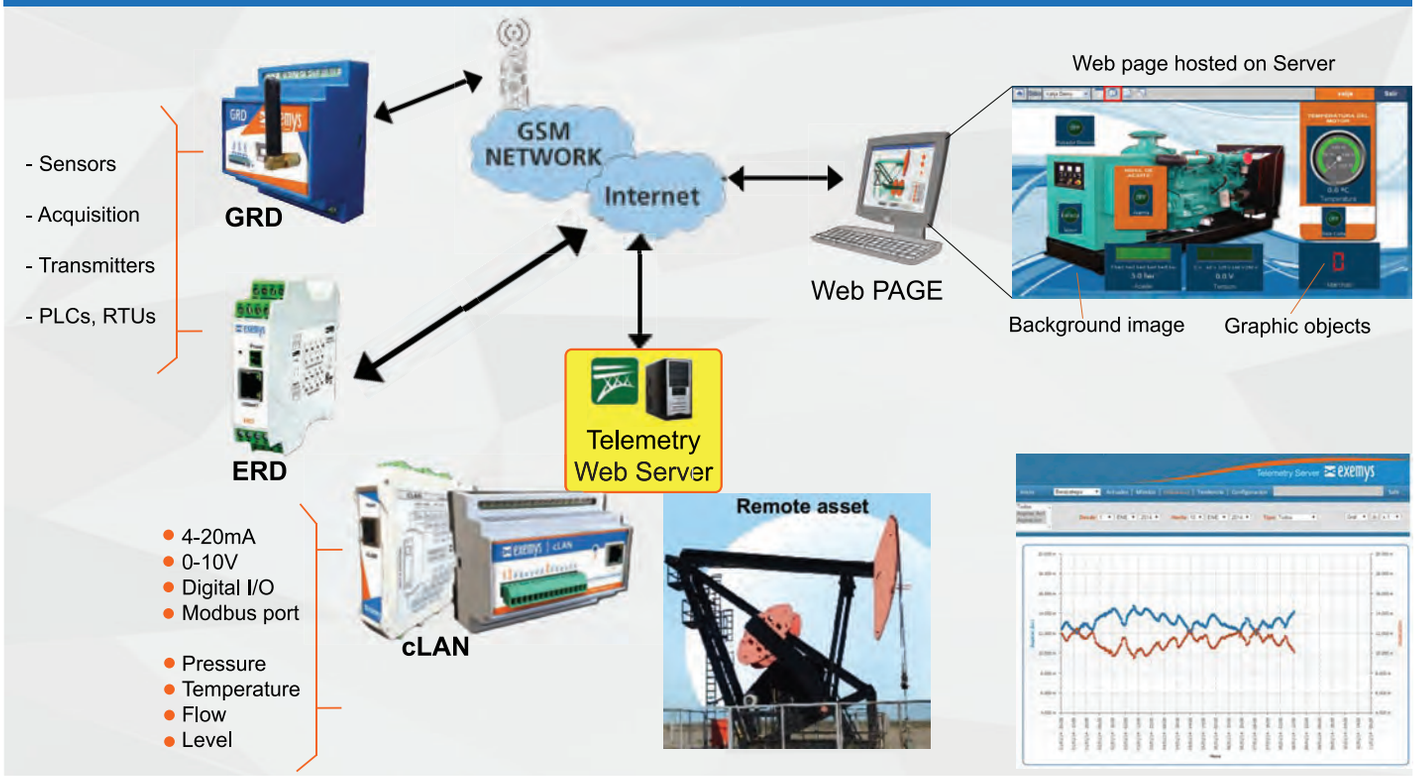




GRD-3534-XF-3G

GRD-1620-XF-3G
GRD-3625-XF-3G

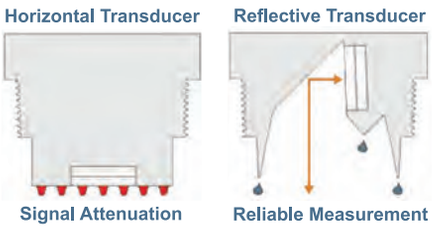
Telemetry Web Server



**For more information, please log on to http://www.scigate.com.sg*

Reflective Technology™

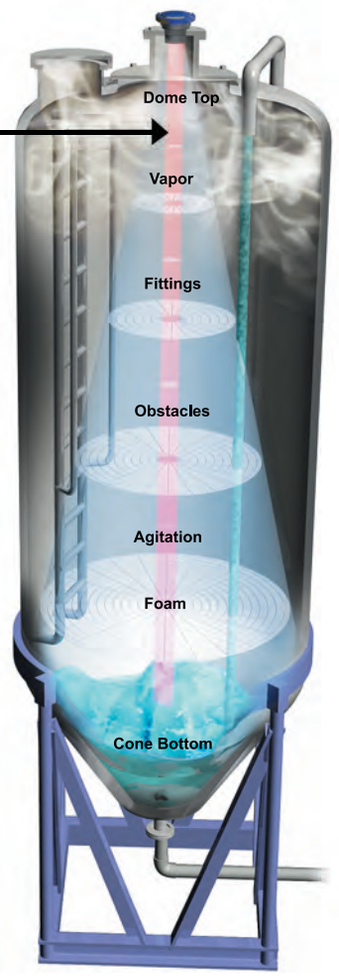
Condensation is the most common variable in liquid level applications. Condensation attenuates the acoustic signal of ultrasonic sensors with horizontal transducers, weakening their signal strength and signal to noise ratio by up to 50% and substantially reducing their measurement reliability. At the core of Reflective Technology™ is a simple fact. Unlike flat horizontal surfaces, significant water droplets cannot adhere to smooth vertical surfaces. By orienting the transducer vertically, condensation runs off the transducer and does not affect sensor performance.The unimpeded transmit and receive signals are redirected to and from the liquid off a 45° reflector, delivering reliable level measurement.



+ DSP Technology

Flowline ultrasonic level sensors feature our patented digital signal processing technology that delivers the Flowline advantage, accurate and reliable, non-contact measurement of chemical, oil, water and wastewater from 0.25m-10m. This adaptive technology creates a living map of your tank process and continuously optimizes sensor power, obstacle recognition, signal output filtering, environmental noise rejection and fail-safe diagnostics.

Beam Width (RED)
This intelligent sensor is taking measurment based on a 3" (7.6cm) invisible beam width, it enable the sensor to works in narrow restricted space that where never available before by any other ultrasonic transmitters.



Reflective Ultrasonic

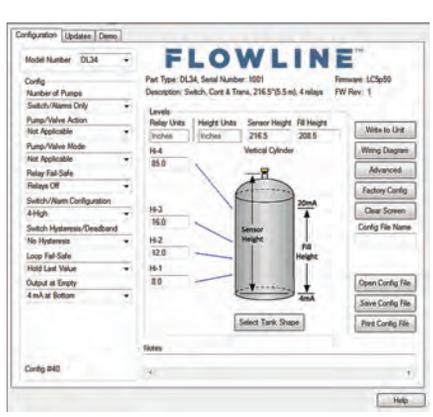
	UG01-03	UG06-12	US01-03	US06-12
Application	Chemical feed, skid/machine, cooling tower, IBC/drum, mini bulk, day tank, waste sump	Bulk storage, day tank, waste sump, clarifier, neutralization	Chemical feed, skid/machine, cooling tower, IBC/drum, mini bulk, day tank, waste sump	Bulk storage, day tank, waste sump, clarifier, neutralization
Classification	General Purpose		Intrinsically Safe	
Measuring Range	1.5m and 3.0m	6.0m and 12.0m	1.5m and 3.0m	6.0m and 12.0m
Output	4-20 mA + (4) SPST relays	4-20 mA	4-20 mA	4-20 mA + HART
Transducer Type	Reflective Technology™			
Transducer Material	PVDF			
Configuration	WebCal Software	Push-Button + WebCal Software	WebCal Software	Push-Button + WebCal Software + HART

General Purpose Ultrasonic | Explosion-Proof | Guided Wave Radar

DL14	DL24	LU2x	LU8x
1.25m	3.0m	10.0m	10.0m

XP88
8.0m

LG10-0	LG10-1	LG10-2
Rod	Coaxial	Cable



Instruments

LI40	LI25-2	LI55	LM92

Vaporous Resin Storage Tank Liquid Level Sensor

Ferric Chloride Storage Tank Liquid Level Sensor

Cardboard Wastewater Sump Tank Liquid Level Sensor

Power Plant Waste Sump Tank Liquid Level Sensor

*For more information, please log on to http://www.scigate.com.sg

Pulse Radar

	LR10	LR15	LR20	LR25	LR30
Application	Storage	Storage	Storage	Process	Lift Station
Classification	General Purpose				
Measuring Range	10m	30m	20m	35m	30m
Output	4-20 mA				
Antenna Material	PTFE	316L	316L & PTFE		Nylon
Configuration	Push-Button				

Intrinsically Safe Version

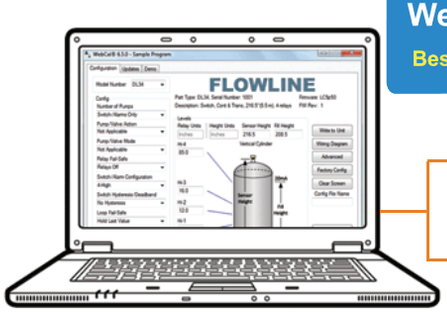
LR11	LR16	LR21	LR26	LR31
EchoPro Liquid Level Transmitter	EchoPro Liquid Level Transmitter	EchoPro Liquid Level Transmitter	EchoPro Liquid Level Transmitter	EchoPro Liquid Level Transmitter

Liquid Level Switch

LU10	LZ12	LV10	LO10	LP16
Ultrasonic Switch	Turning Fork Switch	Vertical Float Switch	Optic Leak Switch	Capacitance Switch

Level Switch Monitoring

AXXX	AX23	AX1X	AX13
Smart-Trak Multi-Point Adjustable Switching position (Max 4), up to 3m height, PP material, 2" NPT or G thread process mounting.		Switch-Pak Single-Point Level Switch, up to 3m height, PVC, PP & PVDF material, 2" NPT or G thread process mounting.	



WebCal® Configuration Software

Best for FAST and EASY Level Sensor Setup

Municipal Chemical Feed Tank Tank Liquid Level Sensor

Municipal Diesel Generator Tank Liquid Level Sensor

HVAC Cooling Water Sump Tank Liquid Level Sensor

Highly Vaporous Chemical Liquid Level Sensor

**For more information, please log on to* http://www.scigate.com.sg

KANSAI Automation

Level Switches

Diaphragm Switch KF-500

Detect pressure change
- No power source
- Viscous liquids
- Corrosive liquids
- High-temperature 150°C
- No moving part

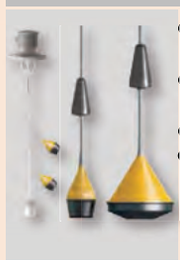
Vertical Float Switch KF-300

- Corrosion resistant
- Max pressure 460KPa
- Max temperature 100°C
- Specific gravity >0.63
- Moisture, gas, dust
- Explosion-proof

Electrode Level Switch KF-600

- For conductive liquid
- Electrode Ø6, 8, 10, 12, 15, 20
- Up to 9 electrode
- Electrode material SUS
- Titanium, Hastelloy

Cable Float Switch KARI



- Specific gravity >0.8
- Single and multi-points
- Viscous liquids
- Scum is surely detected

SUS Float Switch RFS-6

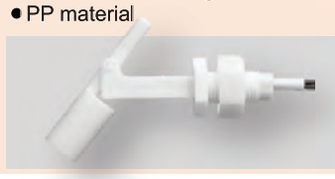
- Corrosion resistant
- Max pressure 1MPa
- Max temperature 200°C
- Specific gravity >0.65
- Moisture, gas, dust
- Explosion-proof

Small Float Switch MFS17-C

- Heat resistant 80°C
- Vertical-mounting
- PP material

Small Float Switch MFS9-N1

- Heat resistant 80°C
- L-shape
- Horizontal-mounting
- PP material



Horizontal Float Switch KF-200

- No power source needed!
- High temperature 250°C
- Specific gravity >0.83
- Explosion-proof

Level Transmitters for Liquid and Powder

Capacitance Level Transmitter KLI / KLT / KLG

- No moving parts
- All conductive media
- Corrosion resistant
- Max Length 50M
- Max Pressure 10 bar
- Max Temperature -200~500°C
- Explosion-proof
- Liquid & Powder

Float Transmitter KF-100

- Specific gravity 0.5~1.0
- Max pressure 4.9 Bar
- Max temperature 100°C
- Explosion-proof
- SUS, PVC, Teflon
- Liquid

Sounding Bob Level Transmitter KSL

- Max length 40m
- Max temperature 100°C
- Explosion-proof
- Suitable for powder

Level / Flow Switch for Powder/Granules

Vibration Level Switch KVX

- Specific gravity >0.03
- No moving parts
- Corrosion resistant
- Max length 6m
- Max pressure 10 bar
- Max temperature -25~150°C
- Explosion-proof
- Powder

Rotary Paddle Level Switch LS

- Specific gravity >0.83
- Max length 300mm
- Max pressure 10 bar
- Max temperature 120°C
- Powder

Capacitance Level Switch ALN / SL

- No moving parts
- All conductive media
- Corrosion resistant
- Max length 2m
- Max pressure 10 bar
- Max temperature -25~80°C
- Explosion-proof
- Liquid and powder
- Teflon coating
- Wire electrode

Microwave Level Switch MWS2

- No moving parts
- Corrosion resistant
- Max distance 35m
- Max temperature -20~900°C
- Powder

Microwave Flow Switch KFD-1

- No moving parts
- Corrosion resistant
- Max distance 1.5m
- Max temperature -10~80°C
- Powder

**For more information, please log on to* http://www.scigate.com.sg

SWISS MADE

STS
global.sensor.excellence

The STS strengths are:
- Available in standard and customized solutions
- High quality and durable products
- Accurate, reliable and long term consistent quality due to in house produced transducer
- Country of origin - Switzerland

Pressure Transmitter

Temperature Transmitter

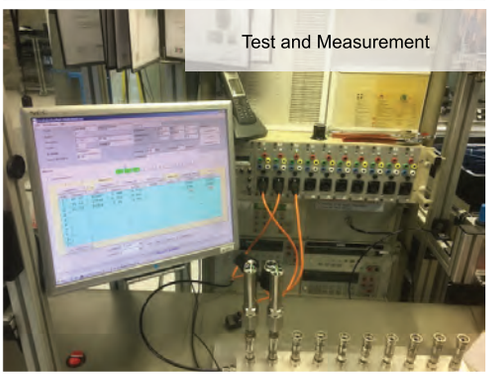
Pressure &Temperature Transmitter

Liquid Level Transmitter

Level & Temperature Transmitter

Pressure Switch

Type	Pressure Transmitter	Hydrostatic Pressure Transmitter
Pressure Range Unit: Bar, mWC, PSI	0 … 100 mbar −1 … 1000 bar	0 … 100 mbar −1 … 1000 bar
Description	Electronics packed in gel Lightning Surge Protection Special Oil Filling: ASEOL food, Halocarbon Combined Pressure and Temperature version	
	17.5mm body diameter	10mm & 19mm body diameter SDI-12 Protocol Ballast weight
Pressure Type	Gauge, Absolute(Vacuum), Sealed Gauge(>25Bar)	Gauge, Absolute
Accuracy	≤ ±0.05/0.1/0.25/0.5/1.0/2.0% FS	
Process Connection	¼" NPT M, ½" NPT M, G ¼"M, G ½"M, G ¼"M Gauge Din 16288, G ½"M Gauge Din 16288, G ½"M frontal diaphragm, G ½"M flush diaphragm	Open / Closed G ¼" M, G ½" M
Output Signal	4~20mA, 0~20mA, 0~10V, 0~5V, mV, RS485 Modbus RTU, Surge Protection (Opt)	
Electrical Connection	Cable Gland, DIN, Binder, MIL	
Cable Material	PUR, PE, FEP	
Housing Material	SUS316L, Titanium, Hastelloy, Inconel, PVDF jacket	
Process Temperature	-40~150˚C	-5~80˚C
Approval	ATEX, IEC Ex, FM, FMC+, GL, GOST, RTN	
Sealing	Viton, EPDM, Kalrez	



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The Terranova strengths are:

- Available in standard and customized solutions
- 50 years of innovation, quality and service on demand
- Serving food and beverage, chemical, pharmaceutical, cement, steel, marine, oil and gas industry
- Country of origin - Italy

T7D Smart Differential Pressure Transmitter

T7N Smart Pressure Transmitter

T79 Smart Pressure Transmitter

T7V Digital Field Indicator

ASL Ultrasonic Level Switch

SPG Self Powered Gauges

OMD Bubbling System for Level Measurement

OMD Oil Mist Detector

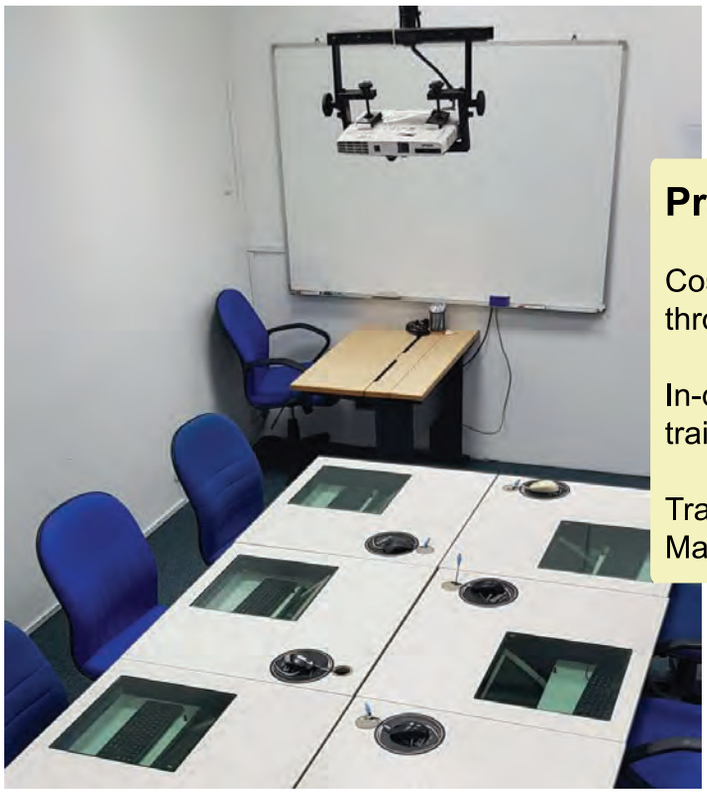
WATER & WASTEWATER

FOOD & BEVERAGES

CHEMICAL, PHARMACEUTICAL & STEEL PLANT

STORAGE TANK

For more information, please log on to https://www.scigate.com.sg

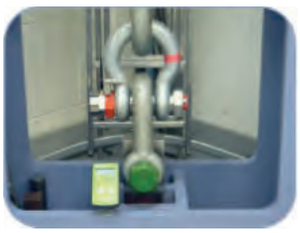


Product Training Facility

Costs reduction and improved system designs through training

In-depth hands-on interaction with products in training class

Training available at training centers across Malaysia and Singapore



Factory Calibration Service

To ensure sensor continuously performs to its specification, all new sensor are supplied with factory calibration and we also offer annual re-calibration service.

We offer full system calibration for sensors with digital displays, amplifiers, and/or USB Solutions and use calibration procedures in compliance with ISO 17025 standards.

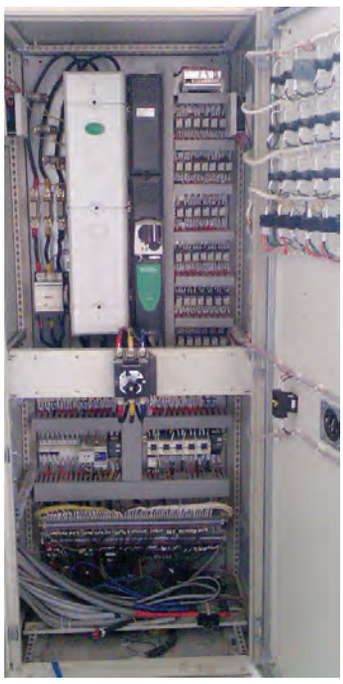
Product Repair and Service

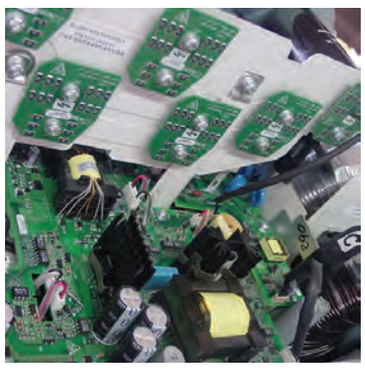
Provide local repairs and servicing for our customers

Help customers to reduce cost and machine down time

Works are carried out by trained and experienced technicians

Quick services and affordable price!

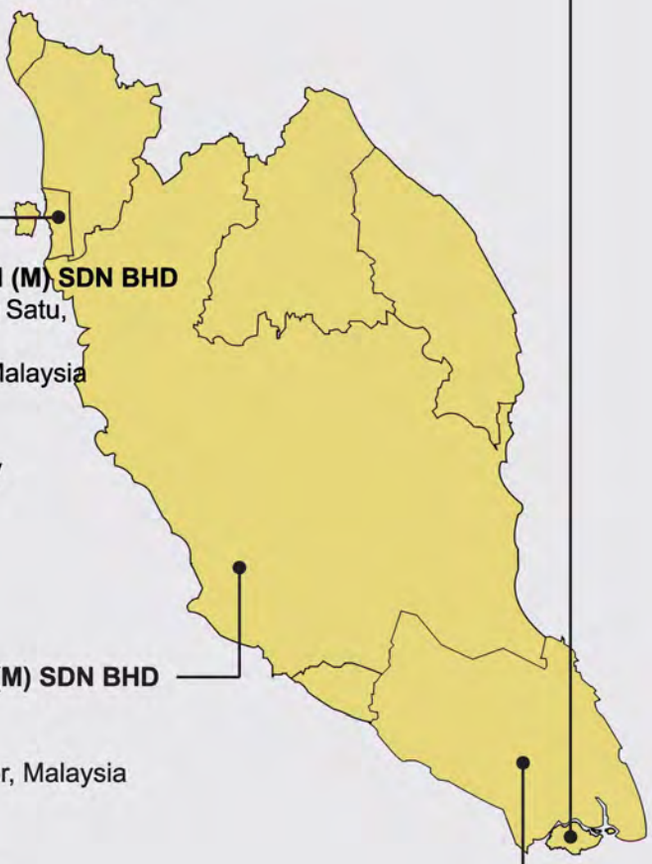




**For more information, please log on to* http://www.scigate.com.sg

OFFICE MAP AND ADDRESS

SCIGATE AUTOMATION (S) PTE LTD
No.1 Bukit Batok Street 22 #01-01
Singapore 659592
Tel: (65) 65610488
Fax: (65) 65620588
Email: sales@scigate.com.sg



SCIENGATE AUTOMATION (M) SDN BHD
14, 1st Floor, Tingkat Talang Satu,
Taman Emas,
13600 Prai, Pulau Pinang, Malaysia
Tel: (60) 04 3997522
Fax: (60) 04 3997509
Email: info@scigate.com.my

SCIENGATE AUTOMATION (M) SDN BHD
17-3, Blk E1, Dataran Prima,
Jalan Pju 1/42,
47301 Petaling Jaya, Selangor, Malaysia
Tel: (60) 03 78047522
Fax: (60) 03 78047422
Email: info@scigate.com.my

SCIENGATE JB SDN BHD
No.72-01 Jalan Molek 1/28
Taman Molek,
81100 Johor Bahru, Malaysia
Tel: (60) 07 3519806, 07 3578806
Fax: (60) 07 3519807
Email: sales@scigate.com.sg

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@scigatepteltd
+65 8318 4938
http://www.scigate.com.sg