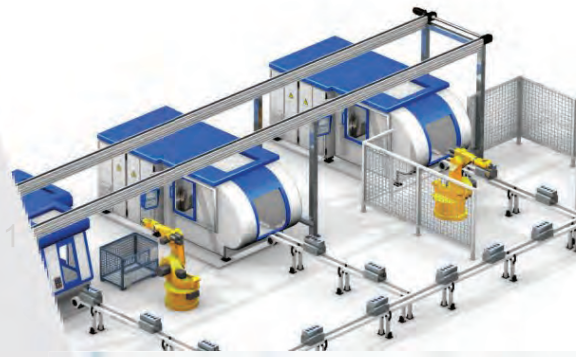


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PRODUCT GUIDE IX

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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

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IoT

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INDUSTRIES WE SERVED.....

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

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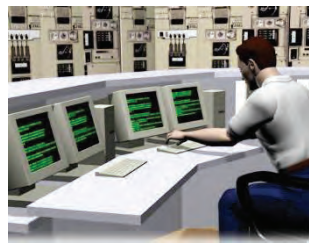


SP5000 Series

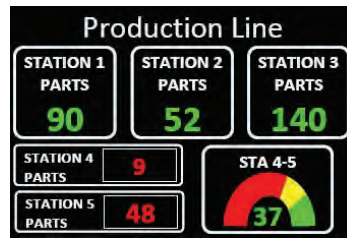
Connecting information and people for optimal communication



Cloud Data Server



SCADA



ANDON System

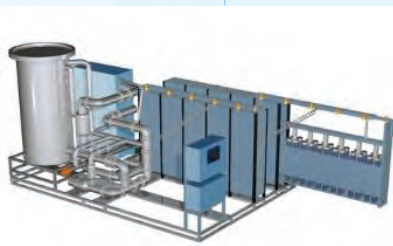
	Ideal	Normal
Availability	90%	79%
Performance	95%	80%
Quality	99.9%	95%
OEE	85%	60%

OEE System

Enterprise Network



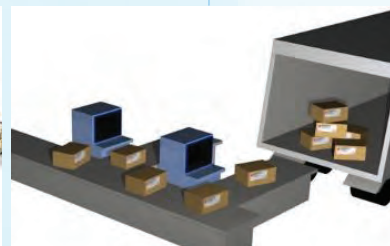
Production Network



Facility



Production

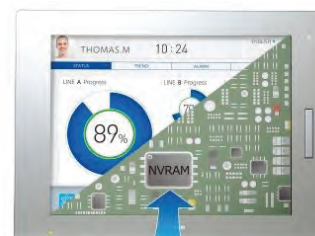


Logistic



QA/QC

- CPU computing power About 2x
- Graphical engine About 3x
- Start-up time About 1.5x
- Free storage space About 3x
- Data access speed (read/write) About 2x



Switch off power in the same way as the normal HMI even without executing shutdown processes like a computer

Use handwritten memos for task handover

Open Box
Run Windows OS
Third Parties application

Open Box / Power Box

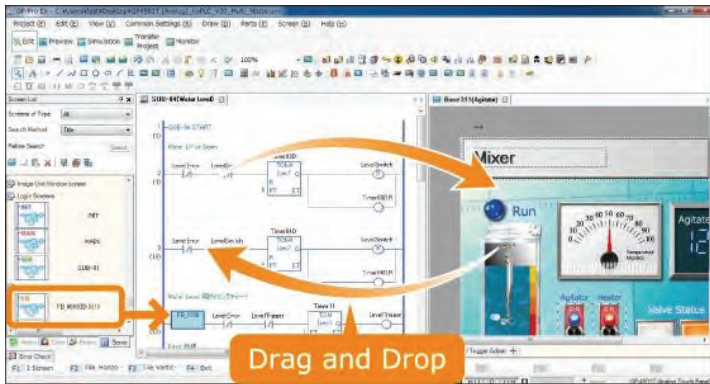


1. Widest model and range line-up in the Pro-face brand

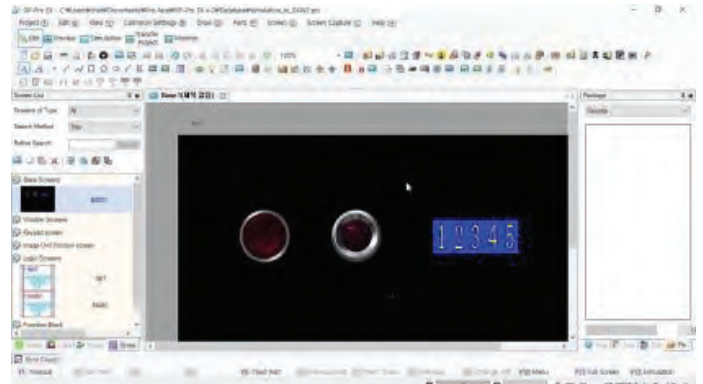


2. User friendly software and develop screen program in short time

Many pre-configured sample screen for immediate



Ladder Function



Screen Simulation Function

3. Lower maintenance cost due to long lasting and easy to replace, compatible with our legacy models

Backward compactable software



GP410



GP577R



GP2000



GP3000



GP4000

Data in GP-PRO/PBIII for Windows or later is convertible using project converter. Smooth transition to the latest models. Since the 80s, programmed in DOS OS.

Same cut-out size



Panel cut-out dimensions compatibility for easy replacement

4. Easily connect multiple USB devices

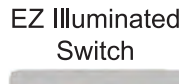
Easily connect to HMI with a USB cable. Cabling labor time is reduced.



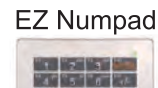
USB Cable



EZ Tower Light



EZ Illuminated Switch



EZ Numpad

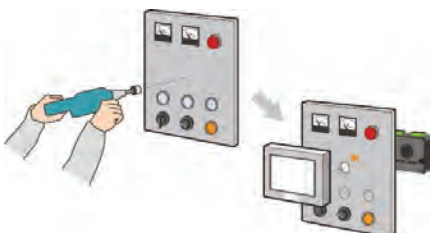


EZ LAN Adapter

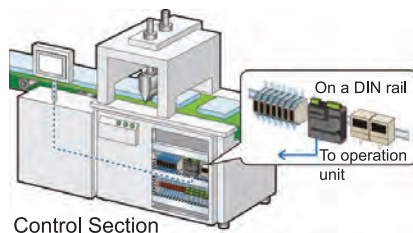


USB Hub

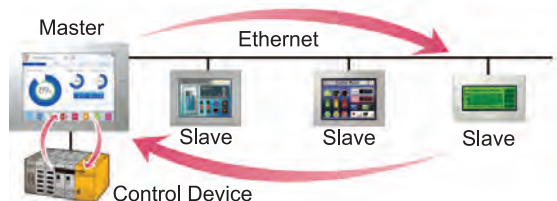
Compact all-in-one unit for easy installation in small spaces



Flexible installation for integrated or separated



Ethernet Multi-Link function



Excellent performance in a comfortable package

Variety of screen sizes and interface options

Solid quality with carefully-selected, reliable parts

Long-term supply of OS

Remote display

Compatible with encryption enabled by TPM, Windows BitLocker and McAfee Embedded Control license



High-quality, attractive enclosure and integrated heat sink contrast

Design and maintenance-conscious interface layout

IP66 for harsh and dusty conditions

Multi-touch display contrast

Low-reflectivity glass less glare and higher contrast

Full HD display contrast

Hot-swappable HDD during operation

Fan-less design prevent IPC stop functioning due to excessive heat, dust and oil

Compatible panel cut out of PL3000 Series (2003)

Many interface options

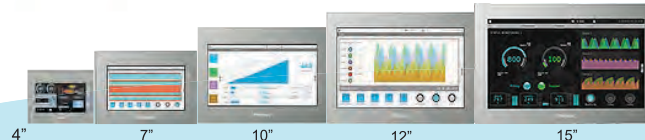
40% ultra-thin

VESA mounting

ST6000 Series - Achieve a high level of visualization with the new basic HMI

BLUE Versatile Software

Revolution new software, BLUE will offer an alternative experience in hardware design. Anyone can easily create and change dynamic screens allowed for gesture operation. BLUE will provide a ground-breaking versatile design style.



- Aluminum Front Panel
- 16 Million colors
- Better graphics and font
- Dual ethernet ports

- COM1: RS-232C
- COM2: RS-422/485



- USB 2.0 (Type A)
- USB 2.0 (Micro B)
- Ethernet1: 10BASE-T/100BASE-TX
- Ethernet2: 10BASE-T/100BASE-TX

M221 PLC: The best performance for its size!

- SD card and USB port
- 2 analog inputs and a broad choice of I/Os
- Run/stop switch and cartridge extension
- Ethernet and serial line ports
- High degree of flexibility lets you add additional modules easily

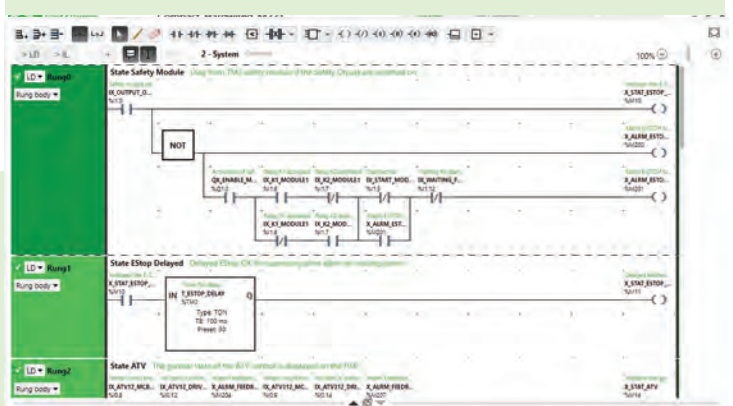


M241 Logic Controller: The benchmark for compact machine controllers!

- 5 Ethernet ports, CANopen, 2 serial lines, USB port for programming
- High processing CPU and cartridge extensions
- Web Server and FTP server
- Pulse train outputs / high-speed counters
- SD card
- Fast and easy configuration



EcoStruxure Machine Expert – Basic™ (formerly known as SoMachine)



M251 Logic Controller- Your choice for modular and distributed architectures that connect everything!

- Expansion bus Modicon TM3
- Ultra compact format
- Up to 14 fast expansion modules
- Powerful data transfer via SD Card, embedded Web- & FTP Server
- 22µs by instruction
- 64MB Ram and 128MB Flash
- CANopen, Modbus TCP, and EtherNet/IP
- Embedded Ethernet switch with 2 ports
- Up to 3 communication modules

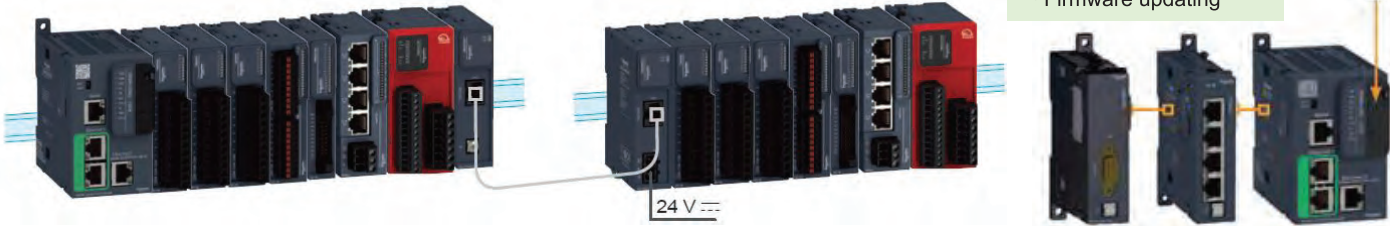


They can be programmed in:

- Instruction List (IL) language
- Ladder (LD) language
- Grafcet graphic language
- Structured Text (ST) operations
- User-defined functions
- User-defined function blocks

SD memory card

- Application backup
- Program transfer
- Data logging
- Firmware updating



	TM221CE16R	TM221CE24R	TM221CE40R	TM241CE24R	TM241CE40R	TM251MESE
Digital Inputs	9	14	24	14	24	-
Relay Outputs	7	10	16	4T/6R	4T/12R	-
Analog Inputs	2 x 0~10V			-		
Max. expansion modules	7 Modicon TM3 expansion modules / 14 bus expansion modules					
Ethernet link	1					Port 1: 2 x RJ45 Port 2: Fieldbus
Serial link	1			2		1
Process control	PID					
Counting	4 x 100KHz			8 x 100KHz		
Position control	2 Axes Pulse Direction 1 Axes CW/CCW			<ul style="list-style-type: none"> • Pulse train (PTO) P/D, CW and CCW, 100 kHz frequency • Pulse width modulation (PWM) • Frequency generator (FG) 		
Software programming	SoMachine Basic software			SoMachine software		
Processing power	-			<ul style="list-style-type: none"> • DualCore processor • Program size: 10 MB for application and symbols 		
Execution speed	0.2 ms/Boolean instruction			22 ns/Boolean instruction		
Program	10 Boolean K instructions			128 Boolean K instructions		
Number of words	8,000			-		
Number of internal bits	1,024			-		
RAM	640 K (256 K for internal variables and 256 K for application and client data)			64 MB		
Flash memory	2 MB			28 MB		
Supply voltage	AC100~240V					DC24V

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

Industrial Panel PCs

Winmate is the Professional and Modularized Panel PC Provider



Front IP65 Water and Dust Proof



IP65 sealing, which means it is completely impervious to dust and is even protected against splash of waters (within certain limits).

P-Cap Touch



Projected capacitive touch for the ultimate convenience and ease of use, allowing users to feel pleasant experience when using the device.

Industrial panel pc is an all-in-one system designed around a highlight integrated Intel Core i3/i5/i7 (Kaby Lake) single board computers. It supports touch panel displays and offers multiple expansion and I/Os.

Chassis Display



Industrial chassis display comes in a sleek housing to perfectly fit in confined spaces. Display varies in color and size ranging from 6.5" up to 64.5".

Panel Mount Display



Panel mount display is perfect for space considerations and support panel, front mount and VESA mounting for different applications.

Front IP65 Display



Designed to be rugged, Front IP65 Display are ideal for use in wet and dusty environments, such as outdoor kiosks or SPA pool kiosks.

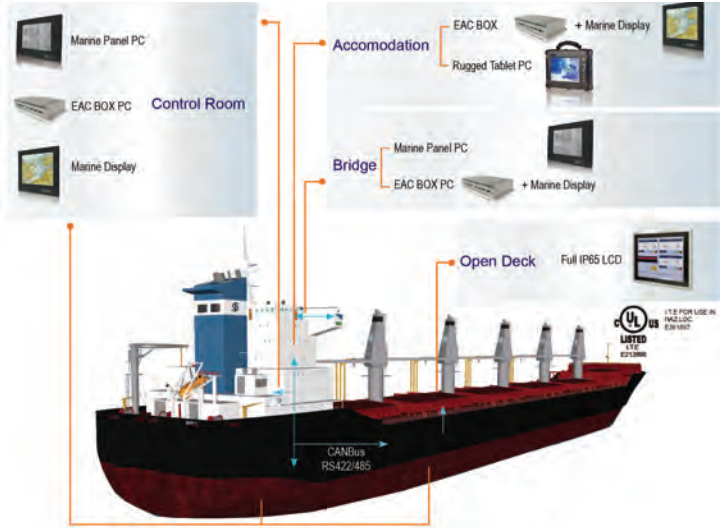
Full IP65 Display



Winmate multipurpose and waterproof fully sealed IP65 display is protected against outer dust and water splash and ideal for use in harsh environments such as food processing and packaging automation.

Marine

Marine Grade Panel PCs with Various Display Interface Options with Various Display Interface Options



Marine Display

- 10.4/12.1/15/17/19/20.1/24"
- Front panel OSD control
- Dimming knob backlight brightness control

EAC/Marine IPCS

Processor : Intel® Core i7-3555LE 2.5GHz Turbo Max 3.2GHz
 System Memory : 1 x SODIMM, Max 8GB DDR3 1333 (2GB Default)
 Ethernet Controller : Intel 82579-LM GbE PHY
 +
 Intel WG82574L GbE LAN

Oil & Gas

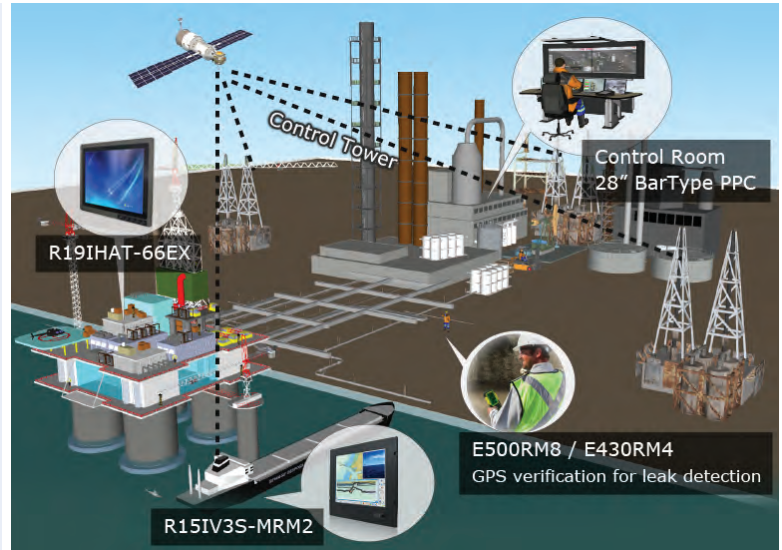
C1D2 and ATEX certified Products for Hazloc Deployment

- Class I, Division 2, Groups A, B, C, and D certificates, ATEX II 3 G Ex ic nA IIC T4 Gc
- Full IP66 protection against dust and water, MIL-STD-810F certified



15" ATEX-Certified Stainless Steel Panel PC

Resolution : 1024x768
 Brightness : 550 (typ.)
 Viewing Angle : -80~80 (H); -70~70 (V)
 Processor : Intel® Atom Dual Core N2600 1.6GHz
 System Memory : 1 x DDR3 SO-DIMM 1333 MHz (default 4GB)



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



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



	Expert Logger	Expert Key	Loggito Logger	Loggito USB	Loggito Wireless	Loggito Gateway
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!

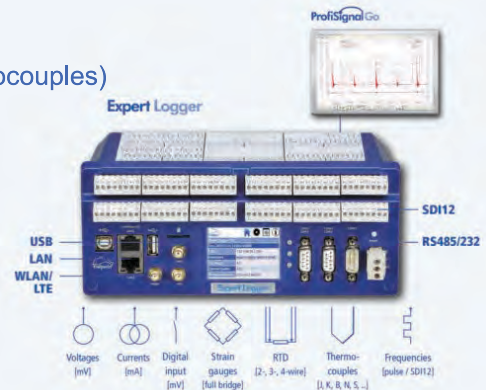


Stand alone and secure data logger!

- 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:-

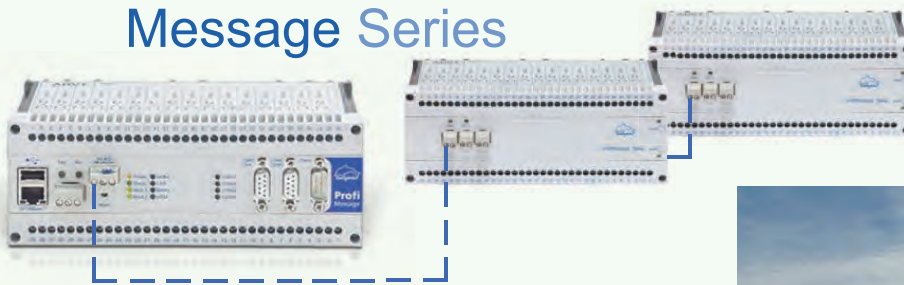
- Traffic census data loggers
- Solar panel data loggers
- Aircraft data loggers
- Temperature data loggers
- Meteorological data loggers
- High-speed data loggers



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

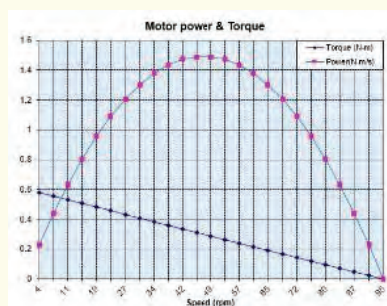


Precision measurement!

- 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



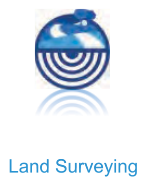
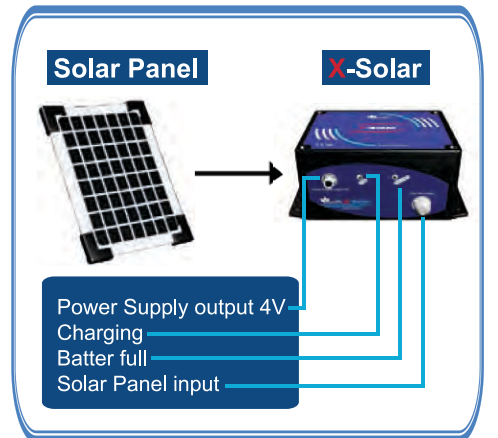
*For more information, please log on to <http://www.scigate.com.sg>



The BeanScope® is a real time WSN supervision and control monitor. It allows the users to monitor and operate in real time BeanAir® WSN. The BeanScope® 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	ProcessSensor	EcoSensor
AX 3D Accelerometer Hi-Inc Tiltmeter AX 3DS Shock Sensor AX 3D Xrange High Performance Accelerometer Inc Low Cost Tiltmeter Hi-Inc Xrange High Performance Tiltmeter	AN 420 Analog Current Loop (4-20mA) AN V Analog Voltage (+/- 0V or +/- 10V) AN mV Analog Voltage (+/- 20mV)	One Tir IR Temperature One T Temperature One TH Temperature and Humidity






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>

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



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.



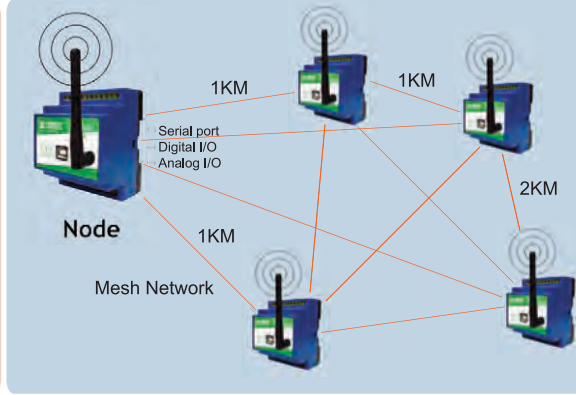
Remote Weather Monitoring Station

Wireless acquisition of environmental data, temperature, raindrop and particulate counter.



Remote Tank Farm Level Monitoring

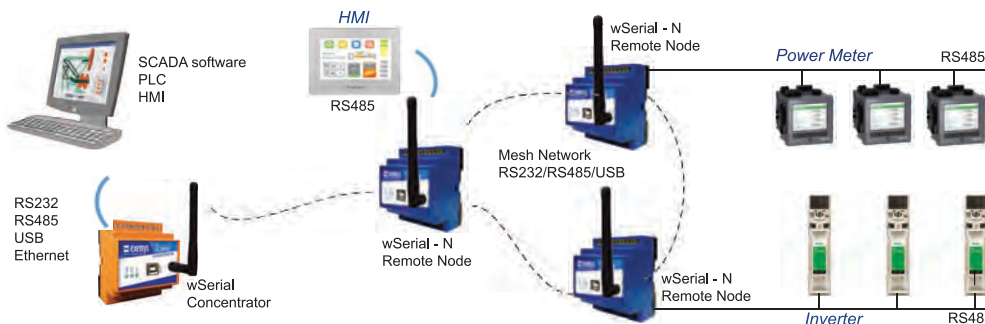
Inventory monitoring and control wirelessly.



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

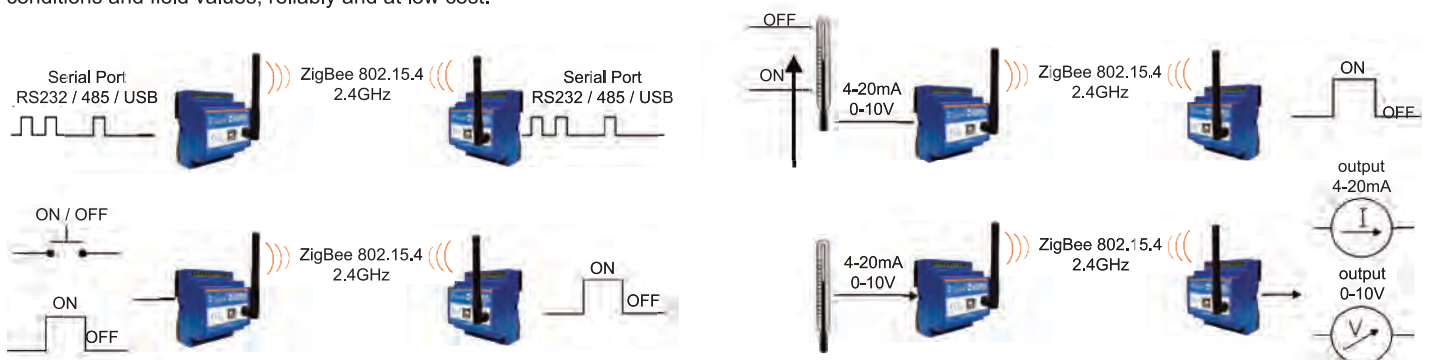


wSerial is a new concept in Serial Radio, which introduces Mesh Networks technology to achieve not only point to point, but also multiple connections. The system was designed to be a real network of serial ports to industrial facilities where there is a need to gather information from remote and dispersed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

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 3G+2G Cellular/Satellite Communication

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



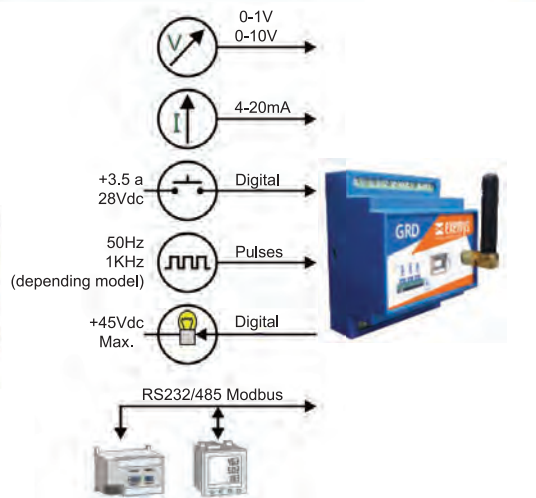
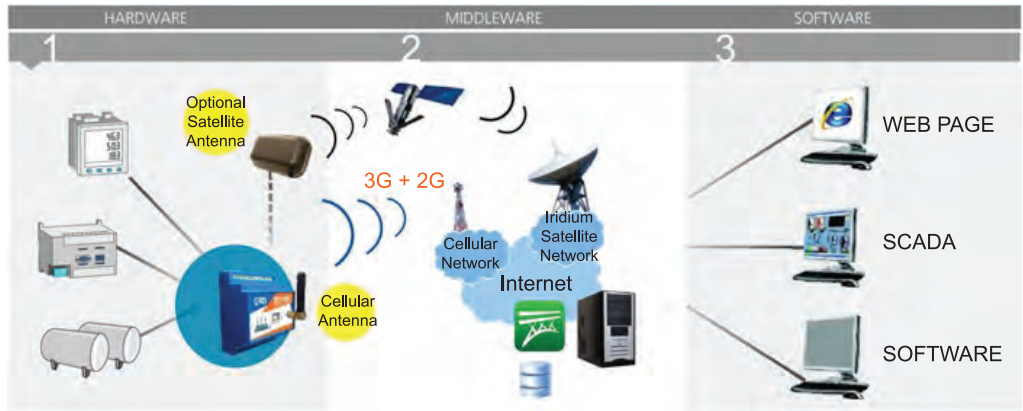
Electric Power

Remote monitoring and control of large size generations.

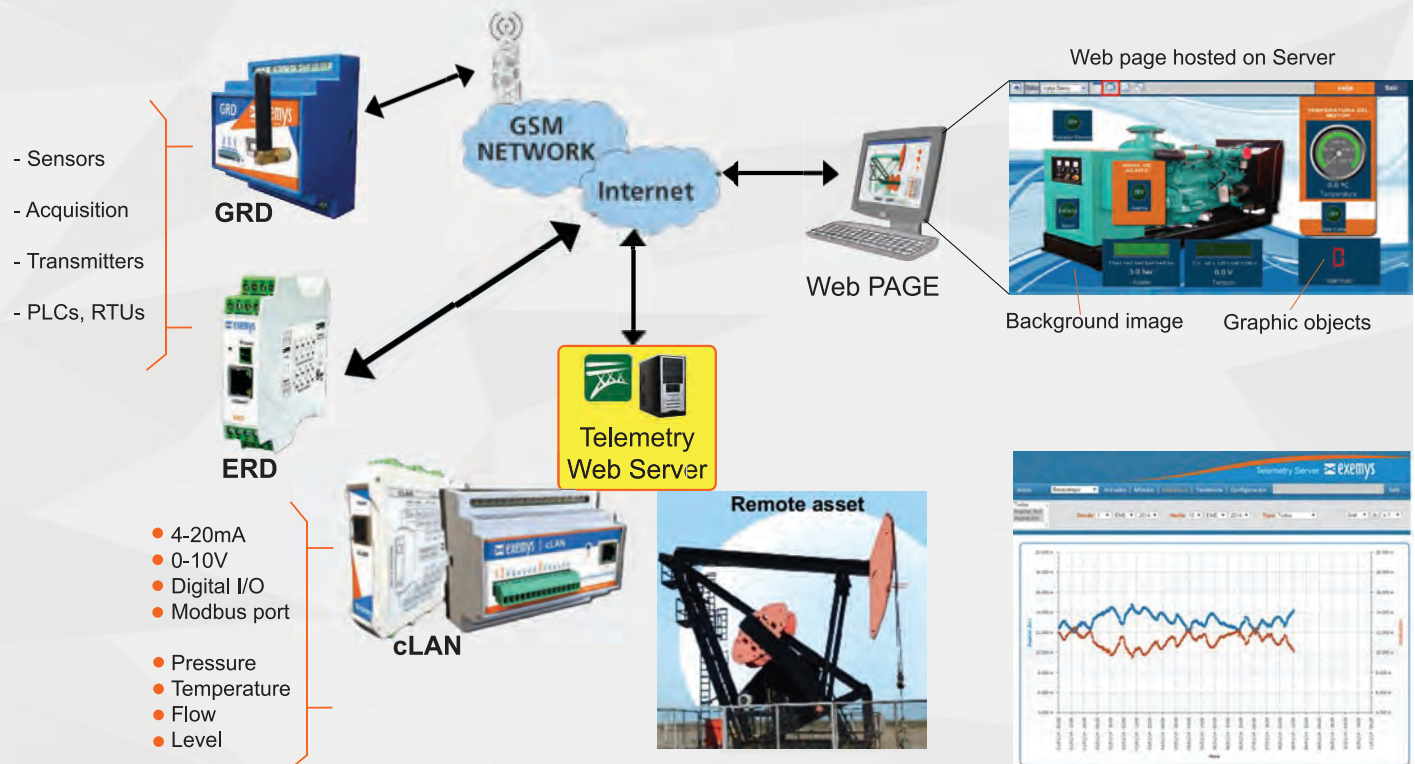


Oil and Gas

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.



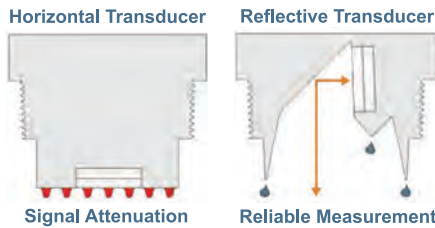
Telemetry Web Server





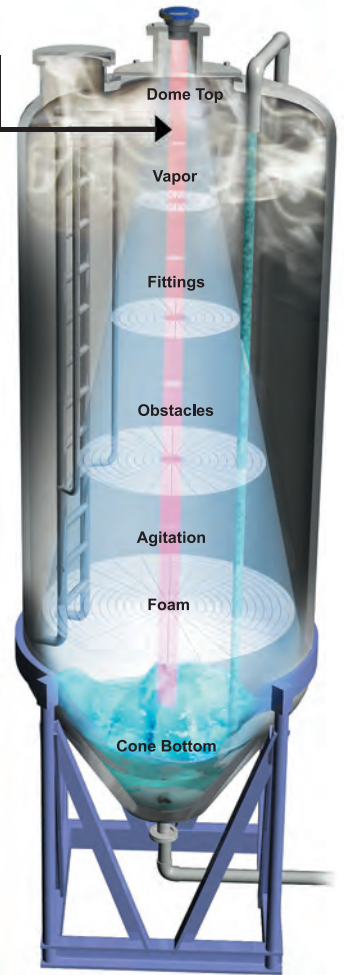
Reflective Technology™

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.



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 measurement 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

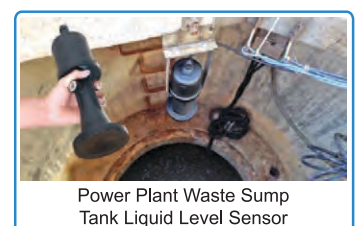
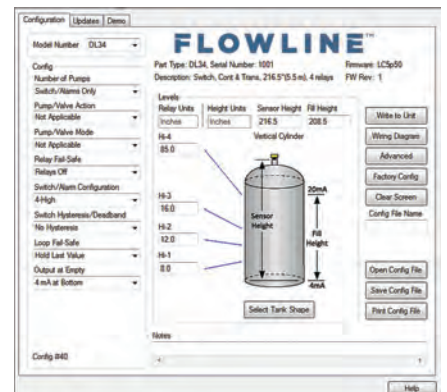
Guided Wave Radar

DL14	DL24	LU2x	LU8x	XP88
1.25m	3.0m	10.0m	10.0m	8.0m

Instruments

LI40	LI25-2	LI55	LM92

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





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

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.	

Liquid Level Switch

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

WebCal® Configuration Software

Best for FAST and EASY Level Sensor Setup







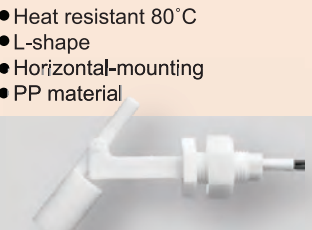
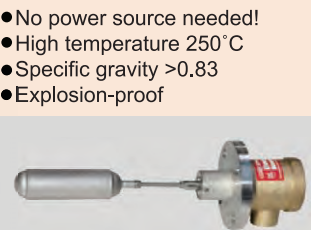
Mounting Accessories






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








Level Switches

<p>Diaphragm Switch KF-500</p>  <ul style="list-style-type: none"> ● Detect pressure change ● No power source ● Viscous liquids ● Corrosive liquids ● High-temperature 150°C ● No moving part 	<p>Vertical Float Switch KF-300</p>  <ul style="list-style-type: none"> ● Corrosion resistant ● Max pressure 460KPa ● Max temperature 100°C ● Specific gravity >0.63 ● Moisture, gas, dust ● Explosion-proof 	<p>Electrode Level Switch KF-600</p>  <ul style="list-style-type: none"> ● For conductive liquid ● Electrode Ø6, 8, 10, 12, 15, 20 ● Up to 9 electrode ● Electrode material SUS ● Titanium, Hastelloy 	<p>Cable Float Switch KARI</p>  <ul style="list-style-type: none"> ● Specific gravity >0.8 ● Single and multi-points ● Viscous liquids ● Scum is surely detected
<p>SUS Float Switch RFS-6</p>  <ul style="list-style-type: none"> ● Corrosion resistant ● Max pressure 1MPa ● Max temperature 200°C ● Specific gravity >0.65 ● Moisture, gas, dust ● Explosion-proof 	<p>Small Float Switch MFS17-C</p>  <ul style="list-style-type: none"> ● Heat resistant 80°C ● Vertical-mounting ● PP material 	<p>Small Float Switch MFS9-N1</p>  <ul style="list-style-type: none"> ● Heat resistant 80°C ● L-shape ● Horizontal-mounting ● PP material 	<p>Horizontal Float Switch KF-200</p>  <ul style="list-style-type: none"> ● No power source needed! ● High temperature 250°C ● Specific gravity >0.83 ● Explosion-proof

Level Transmitters for Liquid and Powder

<p>Capacitance Level Transmitter KLI / KLT / KLG</p>  <ul style="list-style-type: none"> ● No moving parts ● All conductive media ● Corrosion resistant ● Max Length 50M ● Max Pressure 10 bar ● Max Temperature -200~500°C ● Explosion-proof ● Liquid & Powder 	<p>Float Transmitter KF-100</p>  <ul style="list-style-type: none"> ● Specific gravity 0.5~1.0 ● Max pressure 4.9 Bar ● Max temperature 100°C ● Explosion-proof ● SUS, PVC, Teflon ● Liquid 	<p>Sounding Bob Level Transmitter KSL</p>  <ul style="list-style-type: none"> ● Max length 40m ● Max temperature 100°C ● Explosion-proof ● Suitable for powder
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Level / Flow Switch for Powder/Granules

<p>Vibration Level Switch KVX</p>  <ul style="list-style-type: none"> ● Specific gravity >0.03 ● No moving parts ● Corrosion resistant ● Max length 6m ● Max pressure 10 bar ● Max temperature -25~150°C ● Explosion-proof ● Powder 	<p>Rotary Paddle Level Switch LS</p>  <ul style="list-style-type: none"> ● Specific gravity >0.83 ● Max length 300mm ● Max pressure 10 bar ● Max temperature 120°C ● Powder 	<p>Capacitance Level Switch ALN / SL</p>  <ul style="list-style-type: none"> ● 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 	<p>Microwave Level Switch MWS2</p>  <ul style="list-style-type: none"> ● No moving parts ● Corrosion resistant ● Max distance 35m ● Max temperature -20~900°C ● Powder 	<p>Microwave Flow Switch KFD-1</p>  <ul style="list-style-type: none"> ● No moving parts ● Corrosion resistant ● Max distance 1.5m ● Max temperature -10~80°C ● Powder
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*For more information, please log on to <http://www.scigate.com.sg>



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
- Small orders without extra charge
- 10-15 days (Ex-Factory) delivery time for customized products
- Country of Origin - Switzerland



Machine and Plant Construction



Oil and Subsea



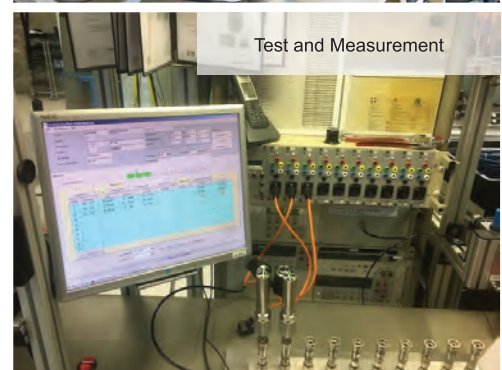
Water and Shipbuilding



Water Treatment



Desalination



Test and Measurement

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	1/4" NPT M, 1/2" NPT M, G 1/4" M, G 1/2" M, G 1/4" M Gauge Din 16288, G 1/2" M Gauge Din 16288, G 1/2" M frontal diaphragm, G 1/2" M flush diaphragm	Open / Closed G 1/4" M, G 1/2" 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	



FUTEK

ADVANCED SENSOR TECHNOLOGY, INC.

Application by Load Cell

Linear Test Stand

Robotic Leg Rehabilitation Device

Rotary Shaft Thrust Force

Wind Tunnel Testing

Bolt Fastening

Spring Testing System



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 forces 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

Miniature Series

Jr. S-Beam Series

Load Button Series

Thru-Hole Series

In-line Series

S-Beam Series

Canister Series

OEM Solutions

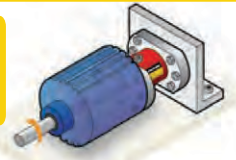


- Working with USB Output
- Working with Handheld
- Working with Panel Mount
- Data logging
- Live graphing
- 16 channels
- Math (fx)

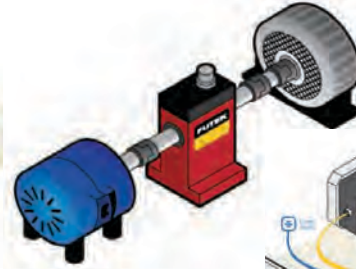
Application by Torque Sensor

Agricultural Poultry Feeder

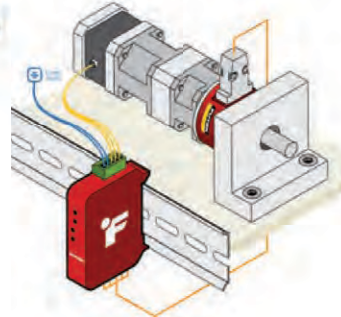
Motor Test Stand



Torque/Motor Test Stand



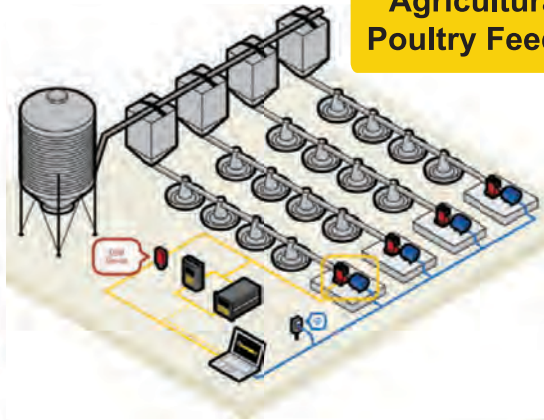
Servo Motor Torque Control



Miniature Torque Screwdriver



Power Tool Measurement



TORQUE SENSORS



Rotary Shaft-to-shaft



MULTI-AXIS SENSORS

Stick Shift Load Cell



Low Profile Thrust and Moment Load cell



INSTRUMENTS



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
- Replace load cell without external jack



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



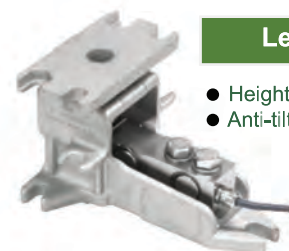
DH

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



Levermount

- Height adjustment
- Anti-tilting




PKD 2000 Weigh Indicators

- 24-key waterproof alphanumeric keypad
- Support 4 weighing scales
- ABS waterproof IP65 enclosure
- Power up to 8 load cells
- CE-M approvable (OIML R-76 / EN 45501)
- Supply AC100~240



PM Platform
Single Off-Centre Load Cell 300kg
Support 800x800mm

PQ Platform Scale
Four Load Cell 3000~6000kg


Off-Centre Load Cell

Low Profile Off-Center Load Cell is high performance single point load cell. There are insensitive to off-center loads or moments, ideal for bench platforms.

PS019


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

PS014


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

PSZL

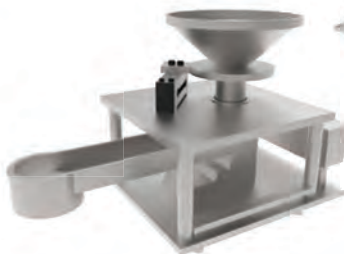

Capacity: 1&2 tonne
Size: 1200x1200mm

PSTA2


Capacity: 6~40kg



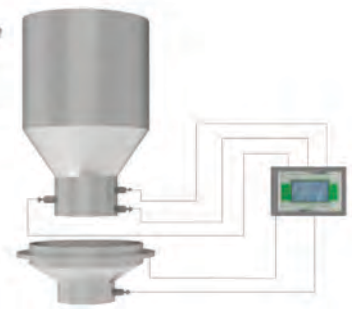
Weighing



Filling



Belt Weighing and Feeding



Dosing and Filling

ATEX Solutions


Wall Mount MCT S 400



Floor Standing MCT S 1302



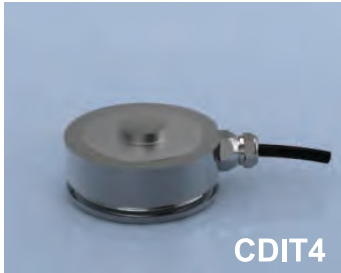
Load Cell DDR



EXD E 70/2

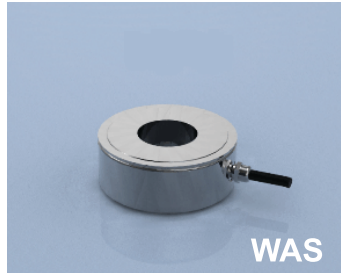


Compression Load Cell



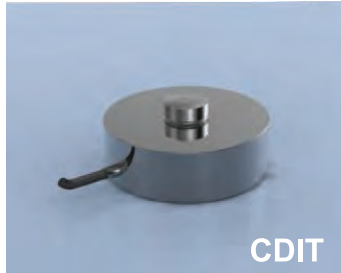
Low profile pancake load cell

- Small physical size
- Stainless steel
- 500kg to 30te
- IP68



Through-hole load cell

- Force washer
- Stainless steel
- 12.5kN to 540kN
- IP66



Low profile pancake load cell

- Small physical size
- Stainless steel
- 100kg 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
- IP66



Column type load cell

- Female end threads
- Stainless steel
- 500kg to 100te
- IP66

Beam Load Cells



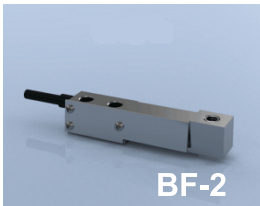
Stud type load cell

- Compact design
- Stainless steel
- 100N to 50kN
- IP65



Shear beam load cell

- 200lb to 5000lb
- Stainless steel
- Unique blind loading hole
- IP67



Beam load cell

- Low range
- Stainless steel
- 2kg to 50kg
- IP65



Shear beam load cell

- 500lb to 10,000lb
- Stainless steel
- Unique blind loading hole
- IP68

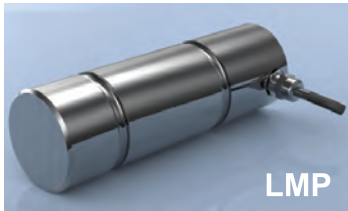
Various Custom Load Cell Solutions





ATEX load cells, load pins and load shackles

Tension Load Cell



LMP



WLL



RILL



LPC

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 Large Format Display



Wireless Tablet Display



Wireless Shackle Wireless Load Link



Wireless Range Extender to 1.6KM



Wireless Modbus Gateway

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
 Serial Output



TR150 – Display



T24 – Display

Various Custom Load Cell Solutions

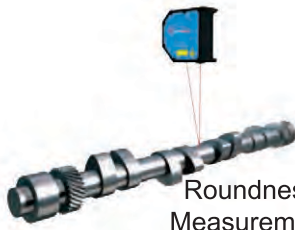
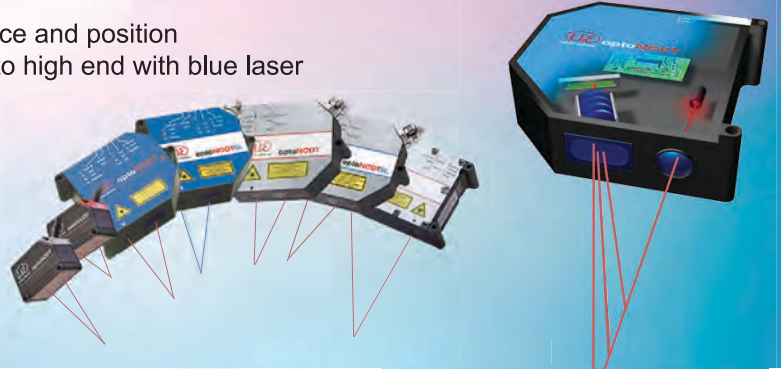




More Precision. Precise . Reliable

Triangulation Laser sensors for displacement, distance and position

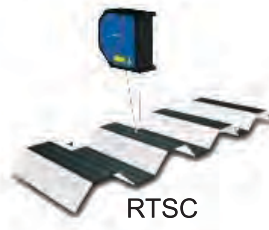
- Worldwide largest range of sensors from low cost to high end with blue laser
- Measuring range from 2 to 1000mm
- Fast measurements up to 49kHz
- Compact design with integrated controller
- Non-contact and wear-free
- Large distance from the measurement object
- Small light spot for smallest parts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



Roundness Measurement



Bend Lead Detection



RTSC

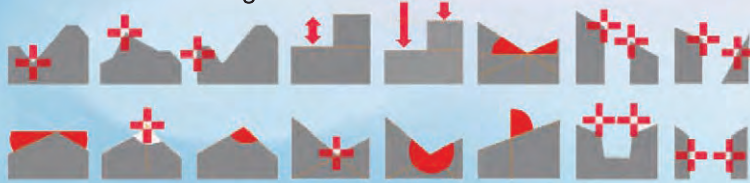


Thickness Measurement

	Measuring ranges (mm)	Linearity ± % FSO	Repeatability µm	Measuring rate (kHz)	Output	Functions
optoNCDT 1220 optoNCDT 1320	10, 25, 50, 100	0.10	1	2	4~20 mA RS422	Compact, high speed
optoNCDT 1420 optoNCDT 1420 CL1	10, 25, 50, 100, 200, 500	0.08	0.5	4	4~20 mA RS422	Smart, fast and precise
optoNCDT 1750	2, 10, 20, 50, 100, 200, 500, 750	0.06	0.1	7.5	4~20 mA; 0~5V/ 0~10V RS422	Universal sensor for industrial applications
optoNCDT 1700BL optoNCDT 2300BL optoNCDT 2300-2DR	2, 5, 20, 50, 200, 500, 750, 1000	0.03	0.0015	49	4~20 mA; 0~5V/ 0~10V RS422	Blue Laser, good for metal and organic materials
optoNCDT 2300	2, 5, 10, 20, 50, 100, 200, 300	0.02	0.0015	49	Ethernet/ EtherCAT/ RS422	High speed for dynamic application, 49KHz sampling
optoNCDT 1750LL optoNCDT 2300LL	2, 10, 20, 50	0.02	0.0015	49	4~20 mA; 0~5V/ 0~10V RS422	Shiny metallic object
optoNCDT 1710 optoNCDT 2310	10, 20, 40, 50, 1000	0.03	0.005	49	Ethernet/ EtherCAT/ RS422	Long-range distances
thicknessSENSOR	10, 25	10µm-40µm	-	4	0~5 V, 0~10 V, ± 5 V, ±10 V, 4~20 mA, 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



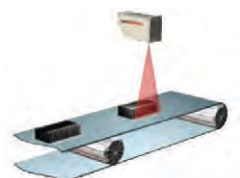
Width Control



Windshield Profile



Alignment of Phone Cover



IC Coplanarity

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

Glass Thickness

Parallelism of Lapping

optoNCDT ILR - Non-contact laser distance sensors

- Extremely large measuring range from 0.1m to 3km
- Integrated heating option for outdoor environments
- Robust and compact design
- Outstanding repeatability and response time
- Use with and without reflector

	Measuring ranges (m)	Linearity (± mm)	Repeatability (mm)	Response time (ms)	Output	Functions
optoNCDT ILR 1030/1031	No reflector 0.2-15 with reflector 0.2-50	20	5	10	4~20mA	Compact laser distance sensors
optoNCDT ILR 1181/1182/1183	Measuring range 0.1 – 150	2	0.5	20	4~20mA RS232/ RS422/ SSI/ Profibus	Precise laser distance sensors
optoNCDT ILR 1191	Measuring range 0.5 - 3000	20	20	0.5	4~20mA RS232/ RS422/ SSI/ Profibus	Laser distance sensors

Classification and sorting

Robot Car

Storage Rack Positioning

Container Positioning



More Precision. Precise . Reliable



Miniature USB thermal imagers

- Non-contact measurement
- Temperature range from -20°C to 2450°C
- Real-time thermography
- Excellent thermal sensitivity and resolution
- Compact design with USB interface

Model	Description	Temperature	System accuracy
TIM 8	Intelligent Spotfinder Pyrometer	-20°C to 900°C	±2°C or ±2 %
TIM 40	Compact OEM Thermal Imaging Camera	-20°C to 900°C	±2°C or ±2 %
TIM QVGA/QVGA-HD	Thermal Imaging Camera with high resolution and sensitivity	-20°C to 900°C	±2°C or ±2 %
TIM 640	Worldwide smallest VGA thermal imaging camera	-20°C to 900°C	±2°C or ±2 %
TIM QVGA-G7/VGA-G7	Thermal imaging camera with line scan feature for the glass industry	200°C to 1500°C	±2°C or ±2 %
TIM M1	Thermal imaging camera for hot metal surfaces	450°C to 1800°C	±1 % of reading
TIM M05	Thermal imaging camera for molten metal and metal surfaces	900°C to 2450°C	±1.5 % 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 CS / CSmicro / CSLaser

- Compact, miniature and low cost
- Temperature ranges from -40 °C to 1600 °C
- Robust, silicon-coated lens
- Integral controller
- Scalable analog output: 0-10 V / 0-5 V
- Ideal for OEMs, also available as two-wire model and high-resolution version



thermoMETER CTRatioM1/M2

- Glass fiber ratio thermometer
- Temperature ranges from 250 °C to 3000 °C
- Up to 200 °C ambient temperature without cooling
- Measurement depends only on the emissivity ratio but not on the absolute emissivity
- Extremely short response time of 1 ms
- Resistant to disturbance such as smoke, fog and partially concealed or moving objects
- The measurement object can be smaller than measurement spot



thermoMETER CTlaser/FAST

- Extremely precise IR sensor with laser sighting
- Temperature ranges from -50 °C to +975 °C
- Infrared sensors with up to 75:1 optical resolution from 0.9 mm measurement spot
- Double laser marks the exact spot location from a spot size of 1mm
- Response time from 9 ms



thermoMETER CTlaser M1/M2/M3

- For metal production with reduced wavelength:
- 50 °C to 2200 °C
- thermoMETER CTlaser M5 (525 nm)**
- For liquid metals: 1000 °C - 2000 °C
- thermoMETER CTlaserGLASS**
- For glass measurement: 100 °C to 1650 °C
- thermoMETER CTlaserCOMBUSTION**
- For measurement of flames: 200 °C to 1450 °C



thermoMETER CT

- Extremely low cost and high accuracy
- Temperature ranges from -50 °C to +975 °C
- One of the smallest infrared sensors worldwide with 22:1 optical resolution
- Up to 180 °C ambient temperature without cooling



thermoMETER CTM1/M2/M3

- For metal processing
- Temperature ranges from 50 °C to 2200 °C
- thermoMETER CThot**
- For difficult ambient conditions up to 250 °C
- Ambient temperature without cooling
- thermoMETER CTM-3XL**
- For laser welding processes from 100 °C to 1800 °C



thermoMETER CTP7 / CTP3

- For thin plastic films from 0 °C to 710 °C

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

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



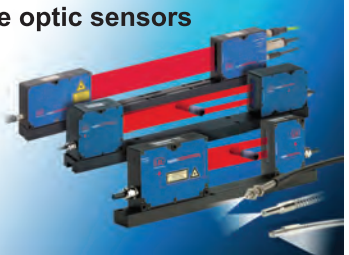
Colour sensors & LED analysers

- 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



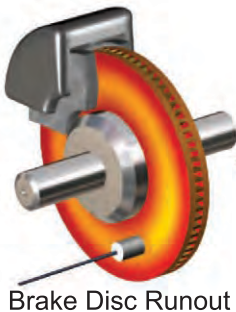
Draw-wire displacement Sensors

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

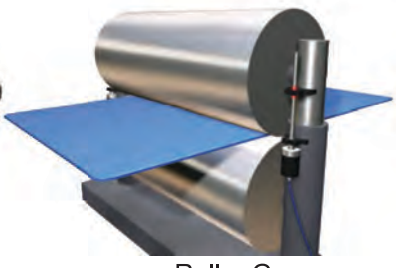


Magneto-inductive displacement sensors

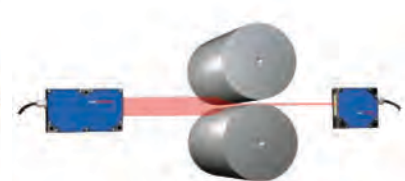
- Large measuring range
- Analogue, digital, PWM outputs
- High measuring rate
- High resolution
- Compact sensor design
- High volume OEM custom solutions



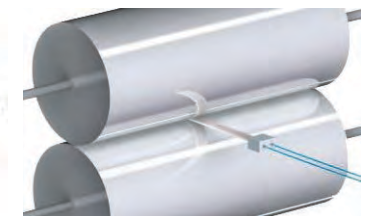
Brake Disc Runout



Roller Gap



Thickness Control



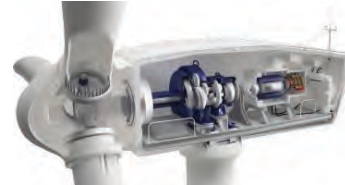
Roller Gap



Position of Bus Lift



Valve Positioning



Wind Turbine



Lift Position



Crane Outrigger Position



Train Door Position

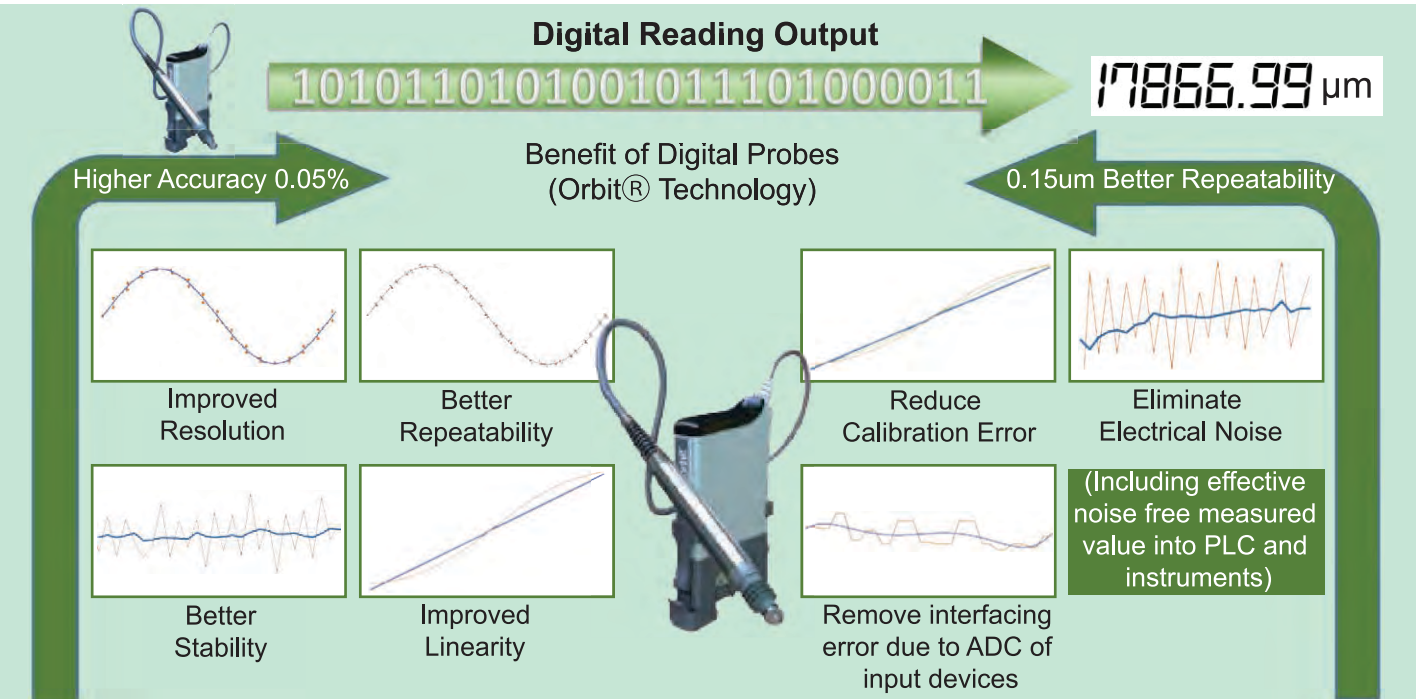
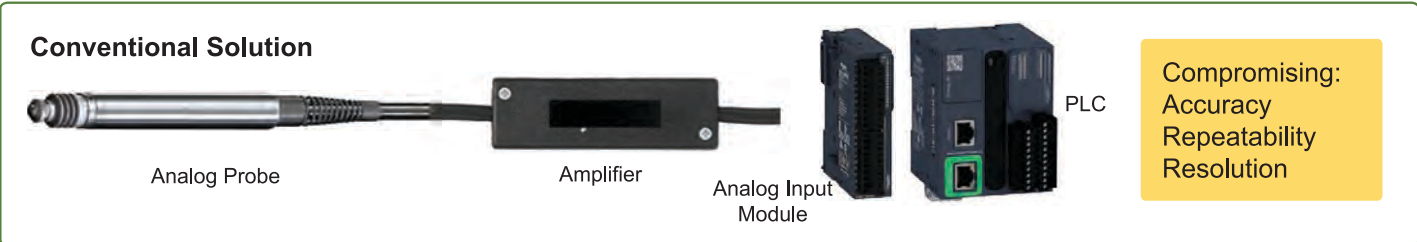
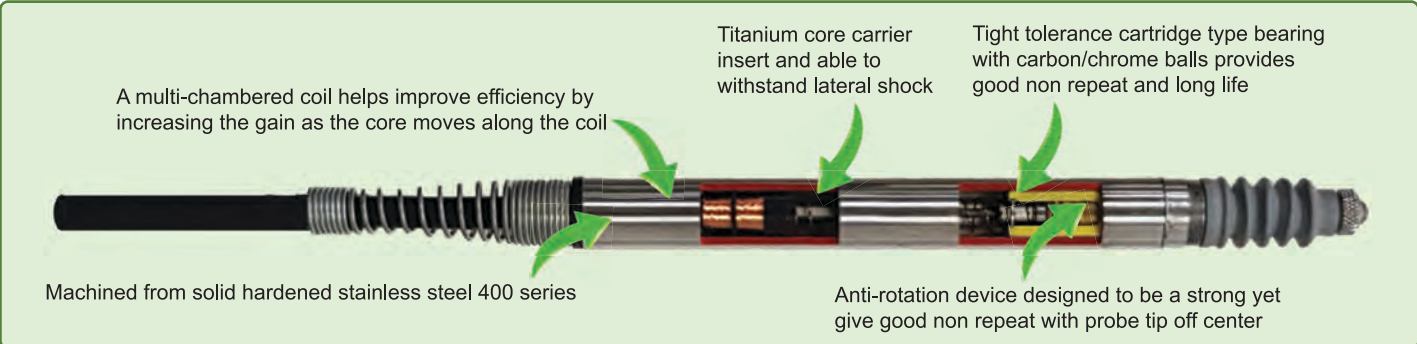


Wire Forklift



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		
DT/30	Contact Force	
D12P/S, D12P/P	0.03N, 0.18N, 0.5N, 0.7N	
D3P/S		



DIGITAL ORBIT NETWORK



Orbit® ACS - Automation and Control System

Orbit ACS

Go / No Go / Limit

Modbus

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



1ch



2ch



4ch

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

PLC



PLC



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



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

The General Purpose Drive

Commander C200
0.25 kW to 132 kW, 100V | 200V | 400V

The drive for a broad range of general applications.

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

Commander C300

Commander C300
0.25 kW to 132 kW, 100V | 200V | 400V

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.

- 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



UNIDRIVE M700

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



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



"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



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

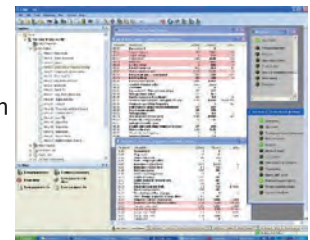


Remote I/O

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



Harmonic and Energy Saving Solutions
Advanced Universal Harmonic Filter - Lineator AUHF



Oil and Gas



Marine



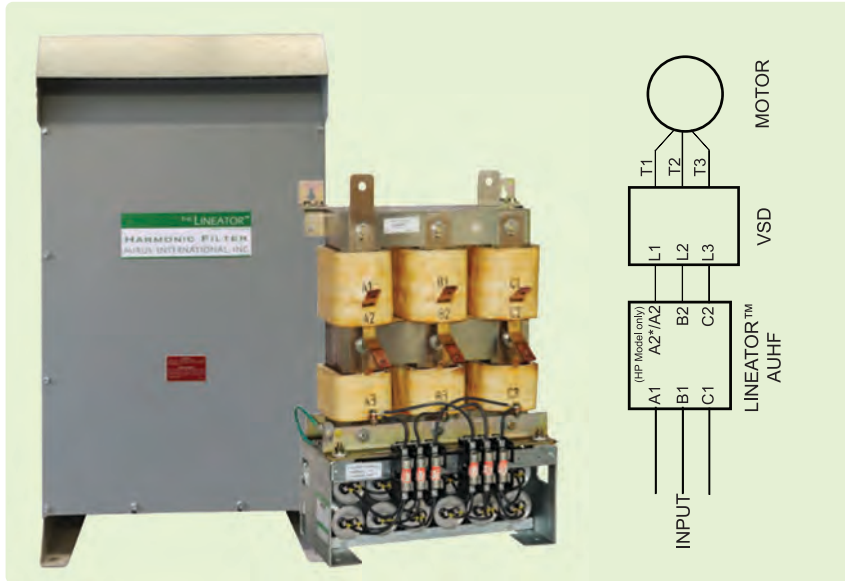
HVAC



Wastewater



Data Center



Issues caused by harmonics may include:

- Transformer and distribution equipment overheating
- Random breaker tripping
- Sensitive equipment failure
- Poor power factor

Remote Monitoring

InSight™ provide remote web-based monitoring of the harmonic condition in real time, allowing easy remote access via any web browser or by adding a touchscreen display at the equipment.



MOS Lineator™
Marine and Offshore
Specific Lineator



Lineator ED
Extreme Duty
LINEATOR™

Revolutionary Reactor Design

- Will meet IEEE 519 Standard for both current and voltage distortion
- Up to 3% more energy efficient than Active Front-end solutions
- ABS / DNV or Lloyds Type Approved for marine applications
- "Wide Spectrum Harmonic Filter" that treats all harmonics generated by 3-phase diode or thyristor bridge rectifiers

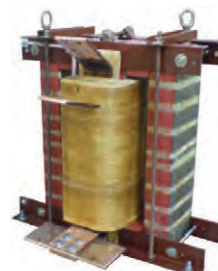
RATING	For motor/drive system sizes 4kW-2600kW
VOLTAGE	Up to 690V
FREQUENCY	50 Hz or 60Hz
OVERLOAD CAPABILITY	150% for 60 sec
HARMONICS TREATED	All harmonics 5th and higher
K-FACTOR SUITABILITY	Up to 20 (Reduced to <1.5 on input of AUHF)
Max. CAPACITIVE REACTIVE CURRENT @ N.L. (kVAR as % of rated kW)	4 - 55KW: < 20% 75 - 2600KW: 10~15%
INPUT CURRENT DISTORTION	< 8% @ Full Load < 5% @ Full Load for HP version
EFFICIENCY	4 to 450KW: > 99.0% 500 to 1350KW: > 99.2% 1450 to 2600KW: > 99.4%
VENTILATION	Convection air cooled Forced air cooled (Option) Water cooled (Option)
AMBIENT TEMPERATURE	≤ 40°C Up to 55°C for ED version
ENCLOSURE	Type: NEMA-3R (IP23) Colour: ANSI 61 Grey Paint: Polyester powder coated Wall Mtg Capability: 4-150 KW
OPTIONS	NEMA-3R (IP23) Outdoor Ventilated Enclosure against rain and snow, Fan Cooling (110-2600KW), Hinged Doors (110-2600KW), IP rated



Lineator HP
High Performance
LINEATOR™



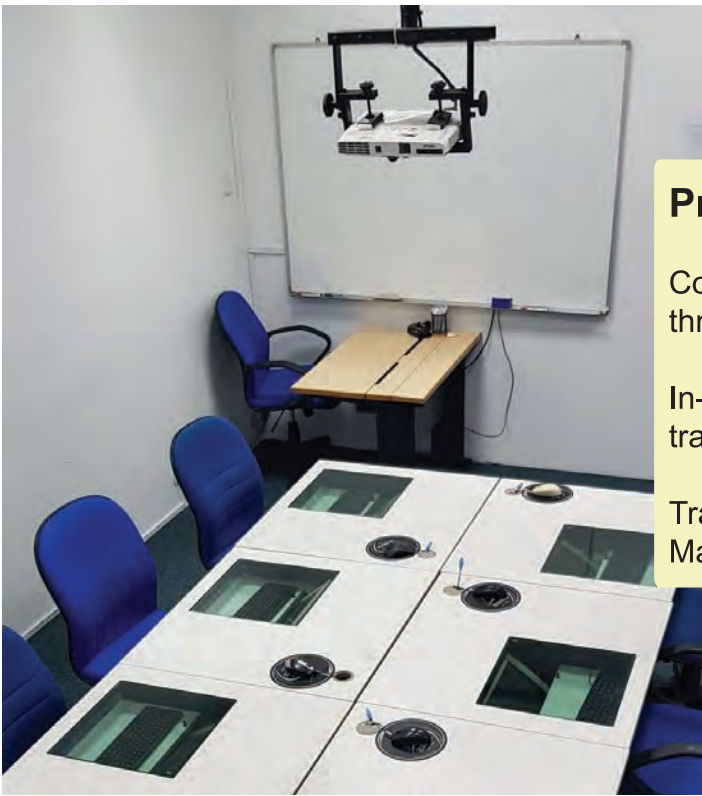
Lineator ATL
Low Voltage Auto
Transformer with
LINEATOR™
Harmonic Filter



GENLINK™ DPNL
Dissimilar Pitch
Neutral Limiter



Lineator 1Q3
Passive Harmonic Filter
for 3-phase VFD's
Operating on a 1-phase
supply



Product Training Facility

Costs reduction and improved system designs through training

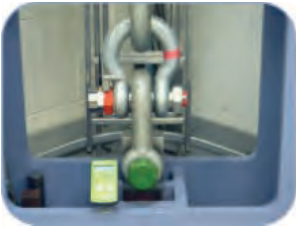
In-depth hands-on interaction with products in training class

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.



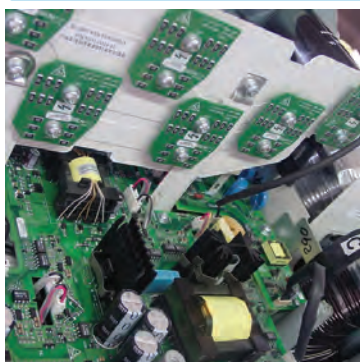
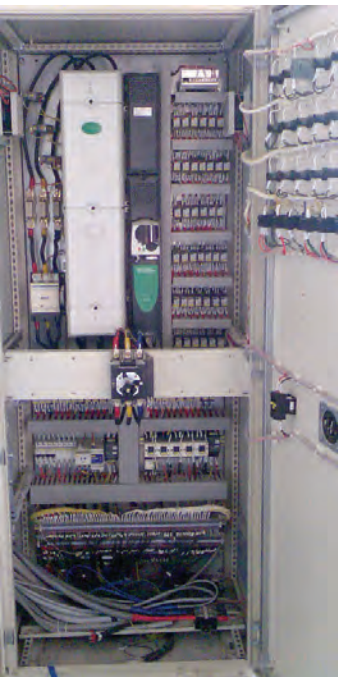
Product Repair and Service

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!





OFFICE MAP AND ADDRESS

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13600 Prai, Pulau Pinang, Malaysia
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Email: info@scigate.com.my



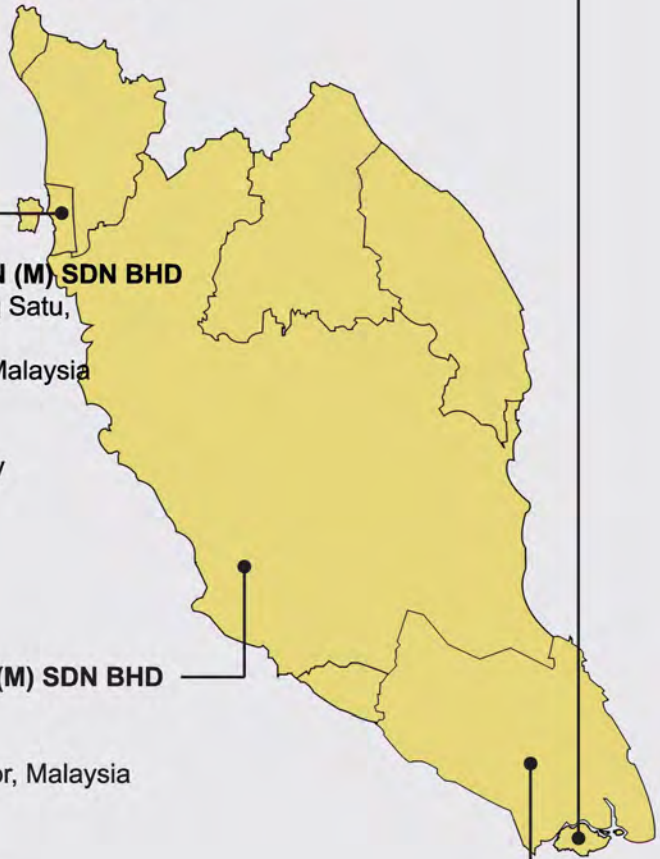
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SCIGATE - Your Automation Partner



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