

PA19-006 GSS wireless sensors		
Item	Description	Approved product price (price per unit unless specified)
1	GSS Real-Time Vibration Monitoring S:r:stcm	40000 / unit
2	Series 1A04-WISENMESHNET 1-Channel VW Interface Node	15696.2 / unit
3	Series 1A04-WISENMESHNET 1-Channel VW Interface Node	2190 / unit
4	A5 - Automatic vibrograph with datalogger	39468 / unit
5	Mounting plate	550 / unit
6	GSS Sensor - External battery pack (36 months battery life)	6000 / unit
7	Webpage Monitoring Portal basic frameware setup	14000 / unit
8	Webpage Monitoring Portal sensor service	5000 per sensor / month
9	Each months SIM card data services	108 per sensor / month
10	HKD 40000 (3GV-01/3GV-02 Vib Sensor)	40000 / unit
11	HKD 28000 (WMS-02 Tilt Senor)	28000 / unit
12	HKD 20000 (WMD-01 USB Dongle)	20000 / unit
13	HKD 30000 (WMM3G 3G Gateway)	30000 / unit
14	Typical Arrangement: 1x USB Dongle / 1x 3G Gateway + 3x Tilt Sensor (Appro. HKD 114000)	114000 / unit
15	2x 3GV Vib Sensor Appro. HKD 80000	80000 / unit
16	WMS-02-SD	28000 / unit
17	WMD-01	20000 / unit
18	WMM3G-04	30000 / unit
19	3GV-02U	40000 / unit
20	Digital G Limited: 1. Water Level Monitoring at 3 locations (by WISENMESHNET system) including installation of vibrating wire piezometer (Max 30m) and 1-CH vibrating wire sensor node at existing Standpipe / Piezometer	50418 / unit
21	2. Vibration Monitoring at 12 locations including installation of vibration sensor node on wall/ground	319956 / unit
22	3. Tilt monitoring at 8 locations (by WISENMESHNET system) including installation	43711 / unit
23	4. Geotechnical monitoring website (for 25 users) for 12 months monitoring of all the above sensors (per month)	96000 / year
24	5. Site visits to check or repair damaged equipment. Material / replacement costs will be charged separately. (Rate only)	64800 / year
25	South Instruments Technology Limited: 1. GSS Real-Time Vibration Monitoring System - 3GV - GSS 3G and Vibration Sensor (3GV) Specifications: -Vibration Limit(XYZ): +/-8G -Conformance: DIN45669-1 -Maximum Response: 1Hz to 1KHz -Accuracy: +/-5% -Sample Rate (Hz): 1000 2000 4000 -Peak Particle Velocity (by design): 0.05 mm/sec to 3000 mm/sec -Peak Particle Velocity (validated): Up to 620 mm/sec -Heartbeat interval: 30 sec to 12 hours -Time Stamping: 1 millisecond -Buffer Size: 1MB -Alert Thresholds: 1 to 620 mm/sec (@ 2G Range) -Alert SMS Numbers: 5 -Data Outputs: Zero Crossing. Peak amplitude/frequency values (1Hz to 1KHz) Peak Particle Velocity (mm/s). Peak Vector Sum (mm/s) Threshold alerts historical trend readings.	28400 / unit
26	2. <u>GSS Real-Time Vibration Monitoring System</u> - System Accessories Including: - Protection Metal Case - Solar Panel System - 12 months SIM card data services with Webpage Monitoring Portal - System Installation service - Training for Webpage Monitoring Portal operation - Training for GSS 3G and Vibration Sensor (3GV)	8940 / unit
27	Series 1A04-WISENMESHNET 1-Channel VW Interface Node	15696.2 / unit
28	- VW Piezometer	4815.60 / unit

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Item	Description	Approved product price (price per unit unless specified)
29	- Signal Cable (per meter)	32.5 / meter
30	- Bi-axial tilt sensor nodes	9.099.50 / unit
31	- Series 1A04-WISENMESHNET 1-Channel VW Interface Node	2190 / unit
32	- Uni-axial Vibrating Wire (VW) Crackmeter with 1-CH VW node	3312 / unit
33	- GSS vibration sensor node on wall / ground	39468 / unit
34	South Instruments Technology Limited: GSS Real-Time Vibration Monitoring System - 3GV - GSS 3G and Vibration Sensor (3GV) Specification: -Conformance: DIN45669-1 -Maximum Response: 1Hz to 1KHz -Accuracy: +/-5% -Sample Rate (Hz): 1000 2000 4000 -Peak Particle Velocity (by design): 0.05 mm/sec to 3000 mm/sec -Peak Particle Velocity (validated): Up to 620 mm/sec -Heartbeat interval: 30 sec to 12 hours -Time Stamping: 1 millisecond -Buffer Size: 1MB -Alert SMS Numbers: 5	28000 / unit
35	- GEM-X11 336 channel GPS/GLO/GAL/BDS including housing	99060 / unit
36	- Point on Server	37120 / unit
37	- Installation for setup server (software)	4000 / unit
38	- Happy Server Service	10000 / Sensor / Year
39	B2 - Bridge Monitoring System - Tilting Monitoring GSS 3G Tilting Sensor (3GV) Specifications: -Euler Angles: Pitch +/- 90° Roll +/- 90° -Resolution: 0.35° -Accuracy: +/- 0.5. -Temperature Stability: +/- 0.050(-45 to 110°C) -Stabilisation Time: 10 secs -Step Response Time: 2 secs -Sample Rate: 50Hz -Heartbeat Interval: 10 sec to 12 hours -Buffer Size: 128Kb -Pre-Alert Buffer: 8192 samples (- Post Alert Buffer) Post-Alert Buffer: 8192 samples (- Pre Alert Buffer) -Pre Alert Rate: 1 sec/sample to 10 sec/sample Post Alert Rate: 1 sec/sample to 10 sec/sample Alert Thresholds: 0.5 to 70.0° -Rearm Tolerance: 0.5 to 45.0. -Rearm Stable: 1 sec to 300 sec	32000 / unit
40	- Webpage Monitoring Portal service	500 / Sensor / Year
41	- Mounting Plate for epoxy glue	500 / unit

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Item	Description	Approved product price (price per unit unless specified)
42	- Webpage Monitoring Portal service Including: -Each months SIM data card data services -Equip with Real time warning Email service for AAA level asset -Training for Webpage Monitoring Portal operation (1 day hardware training and 1 day software training)	500 / Sensor / Month
43	D1.a - Surveying Instruments & Accessories -GSS Real-Time Vibration Monitoring System - GSS 3G and Vibration Sensor (3GV) Specifications: -Conformance: DIN45669-1 -Maximum Response: 1Hz to 1KHz -Accuracy: +/-5% -Sample Rate (Hz): 1000 2000 4000 -Peak Particle Velocity (by design): 0.05 mm/sec to 3000 mm/sec -Peak Particle Velocity (validated): Up to 620 mm/sec -Heartbeat interval: 30 sec to 12 hours -Time Stamping: 1 millisecond -Buffer Size: 1MB -Alert SMS Numbers: 5	29000 / unit
44	Mounting Plate	550 / unit
45	Calibrate 3G Vibration with IAS Certificate (equivalent HOKLAS)	2000 / unit
46	External battery pack (36 months battery life)	6000 / unit
47	Webpage Monitoring Portal basic frameware setup	14000 / job
48	Webpage Monitoring Portal sensor service (HK\$ 5000 for 1 sensor per year) Equip with Real time warning email service for AAA level asset Training for Webpage Monitoring Portal operation	5000 / Sensor / Year
49	Each month SIM card data services (HK\$ 108 for 1 Sensor per month) -	972 / month
50	From: South Instruments Technology Limited Surveying Instruments & Accessories GSS Vibration Series a- 3G Vibration (3GV) Series Specification: -Conformance: DIN45669-1 -Maximum Response: 1Hz to 1KHz -Accuracy: +/-5% -Sample Rate (Hz): 1000 2000 4000 -Peak Particle Velocity (by design): 0.05 mm/sec to 3000 mm/sec -Peak Particle Velocity (validated): Up to 620 mm/sec -Heartbeat interval: 30 sec to 12 hours -Time Stamping: 1 millisecond -Buffer Size: 1MB -Alert SMS Numbers: 5	33480 / unit
51	- Calibrate 3G Vibration with IAS Certificate (equivalent HOKLAS)	2000 / unit
52	3GV Vibration Monitor - (Part No. 3GV)	31580 / unit

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53	Surveying Instruments Service GSS Vibration Sensor (3GV) Specification: -Vibration Limit(XYZ): +/-8G -Maximum Response: 1Hz to 1KHz -Accuracy: +/-5% -Sample Rate (Hz): 1000 2000 4000 -Peak Particle Velocity (by design): 0.05 mm/sec to 3000 mm/sec -Peak Particle Velocity (validated): Up to 620 mm/sec -Buffer Size: 1MB -Alert SMS Numbers: 5 -Data Outputs: Zero Crossing. Peak amplitude/frequency values (1Hz to 1KHz) -Peak Particle Velocity (mm/s). Peak Vector Sum (mm/s)	29380 / unit