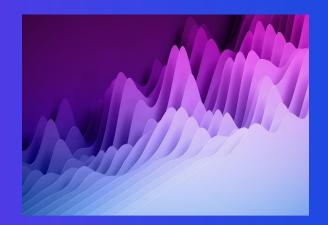


# Test & Measurement

## **Q4 2022 Industry Update**

December 2022



### **Selected M&A highlights**

Dec 22:	Cura Terrae (Palatine Private Equity) acquired Enviro Technology Services, a UK based provider of air monitoring systems		such as microbiological analysis services, from enumeration of indicator organisms to detection of foodborne pathogens
Dec 22:	LI-COR Biosciences (Battery Ventures) acquired Anemoment, a US based manufacturer of lightweight, low-power sonic anemometers	Nov 22:	Elbit Systems, through its subsidiary Sparton Corp, acquired Logos Technologies, a US based maker of sensor equipment for UAV's
Dec 22:	Pion Inc. acquired Two Square Science, a US based designer and manufacturer of automated test and monitoring systems for pharmaceutical, life science and biotech industries	Nov 22:	Nederman Holding acquired MBE AG, a Switzerland based company that sells gas measuring instruments, services around gas detection technology, and continuous monitoring of liquid processes to the Swiss market, for CHF 2m
Dec 22:	Ion Science acquired Analox, a UK based manufacturer of gas sensing and analysis technology	Nov 22:	Indutrade AB acquired a 70% stake in Palas GmbH, a Germany based manufacturer of particle measuring devices, specialising in aerosol technology
Dec 22:	In-Place Machining Company acquired East Coast Metrology, a US based provider of precision measurement services, training and certification, instrument calibrations, integration and alignment services	Oct 22:	AMETEK acquired Navitar, a US based provider of optical components and solutions, and RTDS Technologies, a Canada based provider of real-time power simulation systems, for a combined US\$430m
Dec 22:	RMA Group acquired Northwest Geotechnical, a US based provider of geotechnical engineering, construction inspection and construction materials testing services	Oct 22:	Teledyne Technologies acquired ETM-Electromatic, a US based manufacturer of high- power microwave and high-energy X-ray subsystems for cancer radiotherapy, defense, and X-ray security applications
Dec 22:	SportsMap Tech acquired Infrared Cameras Holdings, a US based manufacturer of infrared and sensing hardware, and provider of thermal analytical software, for US\$125m	Oct 22:	AquaPhoenix Scientific (Incline Management) acquired Chemetrics, a US based manufacturer of water analysis test kits & instrumentation using self-filling reagent
Dec 22:	D&H United Fueling Solutions acquired Petroleum Service & Calibration, a US based provider of compliance testing, inspection and site services	Oct 22:	ampoules for efficiency and safety  Astor Place Holdings acquired Calibration Technologies, a US based manufacturer of
Nov 22:	EQT Infrastructure agreed to acquire a majority stake in Trescal, a Sweden based		hazardous gas detection systems and sensors for employee safety
	provider of essential & regulated calibration services for testing and measurement equipment, for ~EUR 1bn	Oct 22:	Charme Investments acquired Tema Sinergie, an Italy based manufacturer of medical shielded equipment and measuring instruments, for EUR 220m
Nov 22:	CBRE Group acquired Full Spectrum Group, a US based provider of expert technical support services for high-end laboratory systems, for US\$110m	Oct 22:	Viavi Solutions acquired Jackson Labs Technologies, a US based manufacturer of precision timing, frequency and test & measurement instruments based on the latest RF
Nov 22:	Bruker acquired Inscopix, a US based provider of miniaturised microscopes, known as		microprocessor, and software technologies, for USD 170m
	miniscopes, for freely moving animal brain imaging	Oct 22:	Thermo Fisher acquired Binding Site Group, a UK based company involved in the
Nov 22:	AEA Investors acquired Rees Scientific, a US based provider of automated		research, development & production of immunodiagnostic kits & reagents
	environmental monitoring solutions to the high-end life sciences market	Oct 22:	Halma acquired WEETECH, a German based developer and producer of test systems
Nov 22:	SGS acquired Industry Lab. a Romania based provider of testing and analysis services		for cables, back planes and electronic parts and components, for EUR 57m

Public co Sensors							EV/Revenue Revenue (GBPm) Revenue growth		Pm)	EV/EBITDA EBITDA (GBPm) EBITDA %		Pm)	EV/EBIT EBIT (GBPm) EBIT %		2 Year CAGR 2021-2023		
Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA
Amphenol Corporation		Dec-21	37,606	3,142	40,818	1.2x	<b>5.1x</b> 8,032 28%	<b>3.9x</b> 10,400 29%	3.8x 10,659 2%	20.6x 1,981 25%	15.9x 2,566 25%	15.1x 2,697 25%	25.0x 1,635 20%	19.1x 2,141 21%	18.4x 2,217 21%	15%	17%
ams-OSRAM AG		Dec-21	1,582	1,368	2,928	1.6x	<b>0.7x</b> 4,231 35%	<b>0.7x</b> 4,300 2%	0.7x 3,933	<b>4.4x</b> 672 16%	3.3x 875 20%	3.6x 808 21%	<b>44.6x</b> 66 2%	8.1x 363 8%	9.4x 311 8%	(4%)	10%
CTS Corporation		Dec-21	1,043	(34)	1,009	n/a	2.7x 379 22%	2.1x 491 30%	(9%) 2.0x 511 4%	13.0x 78 21%	8.7x 116 24%	8.4x 121 24%	18.6x 54 14%	11.7x 86 18%	11.2x 90 18%	16%	25%
discoverIE Group plc		Mar-22	704	67	771	1.1x	2.1x 360 5%	1.9x 416 15%	1.7x 441 6%	15.6x 49 14%	13.1x 59 14%	12.2x 63 14%	30.6x 25 7%	18.0x 43 10%	15.4x 50 11%	11%	13%
Keyence Corporation		Mar-22	78,485	(6,605)	71,880	n/a	15.9x 4,511 26%	13.1x 5,476 21%	12.1x 5,943 9%	28.5x 2,521 56%	23.5x 3,062 56%	21.7x 3,320 56%	24.3x 2,962 66%	23.9x 3,005 55%	22.0x 3,265 55%	15%	15%
Littelfuse, Inc.		Jan-22	4,524	500	5,024	1.0x	2.7x 1,858 22%	2.4x 2,085 12%	2.2x 2,243 8%	10.0x 501 27%	10.1x 497 24%	9.1x 551 25%	12.2x 411 22%	13.2x 381 18%	11.6x 433 19%	10%	5%
Methode Electronics, Inc.		Apr-22	1,329	86	1,415	0.6x	1.6x 907 17%	1.5x 976 8%	1.4x 1,015 4%	9.5x 149 16%	9.3x 152 16%	<b>8.5x</b> 167 16%	14.1x 100 11%	14.6x 97 10%	13.0x 109 11%	6%	6%
Murata Manufacturing Co., Ltd.	0	Mar-22	26,110	(2,371)	23,739	n/a	2.1x 11,073 5%	2.1x 11,575 5%	2.0x 12,058 4%	<b>6.9x</b> 3,441 31%	<b>6.7x</b> 3,522 30%	<b>6.4x</b> 3,710 31%	8.0x 2,961 27%	9.5x 2,505 22%	9.1x 2,607 22%	4%	4%
Sensata Technologies Holding plc		Dec-21	5,126	2,815	7,941	3.7x	2.8x 2,822 26%	2.4x 3,332 18%	2.3x 3,432 3%	11.9x 670 24%	10.4x 760 23%	9.9x 806 23%	16.4x 483 17%	12.3x 643 19%	11.7x 676 20%	10%	10%
Sensirion Holding AG	0	Dec-21	1,372	(99)	1,269	n/a	5.5x 233 11%	4.3x 295 27%	4.0x 315 7%	<b>17.8x</b> 71 31%	16.8x 76 26%	17.4x 73 23%	21.2x 60 26%	<b>20.6x</b> 61 21%	23.0x 55 17%	16%	1%
TE Connectivity Ltd.		Sep-22	30,225	3,188	34,238	1.0x	2.5x 13,700 44%	2.5x 13,467 (2%)	<b>2.5x</b> 13,546 1%	10.3x 3,337 24%	10.6x 3,237 24%	10.6x 3,227 24%	16.0x 2,144 16%	14.1x 2,430 18%	14.2x 2,411 18%	(1%)	(2%)
TT Electronics plc	N N	Dec-21	305	142	449	2.4x	<b>0.9x</b> 476 10%	<b>0.8x</b> 585 23%	<b>0.7x</b> 613 5%	<b>9.8x</b> 46 10%	<b>7.5x</b> 60 10%	<b>6.7x</b> 67 11%	<b>12.7x</b> 36 7%	<b>10.7x</b> 42 7%	<b>8.9x</b> 50 8%	13%	21%
Min Mean Median							0.7x 2.6x 2.5x	0.7x 2.2x 2.1x	0.7x 2.1x 2.0x	4.4x 13.2x 11.1x	3.3x 11.3x 10.3x	3.6x 10.8x 9.5x	8.0x 20.3x 17.5x	8.1x 14.6x 13.6x	8.9x 14.0x 12.4x	4% 12% 12%	1% 11% 10%
Max							5.5x	4.3x	4.0x	28.5x	23.5x	21.7x	44.6x	23.9x	23.0x	16%	25%

Note: Multiples are based on enterprise value as of 31 December 2022 and historical and forecast sales, EBITDA and EBIT, calendarised to 31 December. "nmf": not meaningful; "n/a": not available. Enterprise Value is adjusted for minority interest, preference equity, pension deficit and investments in associates. Highlighted values are considered as outliers and are not included in calculations

CapIQ

Instrume Industrials							EV/Revenue Revenue (GBPm) Revenue growth		EV/EBITDA EBITDA (GBPm) EBITDA %			EV/EBIT EBIT (GBPm) EBIT %			2 Year CAGR 2021-2023		
Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA
AMETEK, Inc.	<b>_</b>	Dec-21	26,631	1,987	28,618	1.3x	<b>7.0x</b> 4,096 23%	<b>5.6x</b> 5,071 24%	<b>5.4x</b> 5,348 5%	23.2x 1,233 30%	18.2x 1,573 31%	17.1x 1,674 31%	<b>29.0x</b> 987 24%	23.1x 1,242 24%	21.5x 1,330 25%	14%	16%
Fortive Corporation		Dec-21	18,867	2,561	21,432	2.1x	<b>5.5x</b> 3,881 14%	<b>4.5x</b> 4,809 24%	<b>4.3x</b> 4,990 4%	<b>21.6x</b> 992 26%	17.4x 1,235 26%	16.4x 1,308 26%	<b>32.0x</b> 670 17%	<b>25.8x</b> 831 17%	<b>22.7x</b> 946 19%	13%	15%
Halma plc		Mar-22	7,456	500	7,936	1.2x	5.4x 1,474 11%	4.6x 1,723 17%	<b>4.2x</b> 1,871 9%	22.5x 352 24%	19.4x 409 24%	17.7x 449 24%	29.1x 273 19%	22.8x 349 20%	20.2x 393 21%	13%	13%
HORIBA, Ltd.	0	Dec-21	1,523	(409)	1,113	n/a	0.8x 1,439 8%	0.7x 1,616 12%	0.7x 1,592 (1%)	4.1x 273 19%	3.2x 343 21%	3.7x 303 19%	5.0x 222 15%	4.4x 254 16%	4.9x 229 14%	5%	6%
Keysight Technologies, Inc		Oct-22	25,385	(21)	25,364	n/a	5.8x 4,368 38%	5.6x 4,536 4%	5.3x 4,764 5%	19.6x 1,291 30%	18.0x 1,408 31%	16.5x 1,533 32%	28.9x 878 20%	21.5x 1,182 26%	18.4x 1,381 29%	4%	9%
MKS Instruments, Inc.		Dec-21	4,677	3,904	8,581	4.9x	3.9x 2,178 28%	3.0x 2,869 32%	2.8x 3,068 7%	13.3x 647 30%	10.7x 799 28%	11.0x 777 25%	15.4x 558 26%	12.7x 678 24%	14.1x 610 20%	19%	10%
National Instruments Corporation		Dec-21	3,999	416	4,415	1.5x	4.1x 1,085 15%	3.2x 1,379 27%	3.0x 1,471 7%	24.6x 179 17%	16.2x 273 20%	13.6x 323 22%	40.1x 110 10%	16.6x 267 19%	14.7x 300 20%	16%	34%
Oxford Instruments plc		Mar-22	1,304	(66)	1,238	n/a	3.5x 355 12%	3.1x 406 14%	3.0x 419 3%	19.6x 63 18%	15.8x 78 19%	14.6x 85 20%	25.2x 49 14%	18.2x 68 17%	16.5x 75 18%	9%	16%
Renishaw plc		Jun-22	2,669	(237)	2,411	n/a	3.9x 619 15%	3.6x 678 10%	<b>3.4x</b> 701 3%	14.6x 165 27%	<b>12.9x</b> 187 28%	12.0x 200 29%	17.8x 135 22%	15.9x 151 22%	15.3x 157 22%	6%	10%
Roper Technologies, Inc	<b>=</b>	Dec-21	38,032	4,276	42,308	2.3x	9.9x 4,267 20%	<b>9.5x</b> 4,459 4%	<b>8.6x</b> 4,921 10%	25.1x 1,683 39%	22.8x 1,860 42%	20.6x 2,053 42%	<b>35.5x</b> 1,191 28%	33.6x 1,257 28%	30.0x 1,411 29%	7%	10%
Shimadzu Corporation		Mar-22	6,945	(920)	6,041	n/a	2.3x 2,629 2%	2.1x 2,906 11%	2.0x 3,055 5%	12.6x 478 18%	11.4x 530 18%	10.8x 562 18%	13.4x 450 17%	14.3x 424 15%	13.4x 449 15%	8%	8%
Spectris plc		Dec-21	3,137	171	3,305	0.7x	2.6x 1,292 (3%)	2.6x 1,256 (3%)	2.5x 1,316 5%	14.5x 228 18%	13.2x 250 20%	12.5x 265 20%	19.0x 174 13%	16.0x 206 16%	14.9x 222 17%	1%	8%
Min Mean							0.8x 4.6x	0.7x 4.0x	0.7x 3.8x	4.1x 18.0x	3.2x 14.9x	3.7x 13.9x	5.0x 24.2x	4.4x 18.7x	4.9x 17.2x	1% 10%	6% 13%
Median Max							4.0x 9.9x	3.4x 9.5x	3.2x 8.6x	19.6x 25.1x	16.0x 22.8x	14.1x 20.6x	27.0x 40.1x	17.4x 33.6x	15.9x 30.0x	8% 19%	10% 34%

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Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ

	nstrumentation ife Sciences							EV/Revenue Revenue (GBPm) Revenue growth		EV/EBITDA EBITDA (GBPm) EBITDA %		EV/EBIT EBIT (GBPm) EBIT %		2 Year CAGR 2021-2023			
Company	Country	Year End Date	Market Cap (GBPm)	Net Debt / (Cash)	EV (GBPm)	Net debt / EBITDA (2022)	2021	2022	2023	2021	2022	2023	2021	2022	2023	Sales	EBITDA
Agilent Technologies, Inc.		Oct-22	36,773	1,626	38,399	0.9x	<b>6.9x</b> 5,574 39%	<b>6.7x</b> 5,703 2%	<b>6.5x</b> 5,871 3%	24.1x 1,594 29%	<b>22.3x</b> 1,724 30%	20.9x 1,838 31%	<b>34.3x</b> 1,119 20%	26.8x 1,434 25%	23.0x 1,670 28%	3%	7%
Bio-Rad Laboratories, Inc.		Dec-21	10,408	(423)	9,985	n/a	<b>4.6x</b> 2,158 16%	<b>4.3x</b> 2,341 8%	<b>4.1x</b> 2,409 3%	18.3x 545 25%	<b>17.4x</b> 572 24%	<b>16.3x</b> 613 25%	<b>23.9x</b> 418 19%	<b>22.7x</b> 440 19%	<b>20.8x</b> 480 20%	6%	6%
Bruker Corporation		Dec-21	8,344	465	8,824	0.9x	<b>4.9x</b> 1,786 23%	<b>4.3x</b> 2,066 16%	<b>4.1x</b> 2,141 4%	<b>21.9x</b> 402 23%	<b>17.9x</b> 494 24%	<b>16.9x</b> 522 24%	<b>27.5x</b> 321 18%	<b>21.1x</b> 418 20%	19.8x 446 21%	10%	14%
Danaher Corporation		Dec-21	160,360	13,549	175,412	1.5x	8.1x 21,752 33%	<b>6.9x</b> 25,567 18%	6.9x 25,497 (0%)	<b>22.3x</b> 7,859 36%	<b>19.3x</b> 9,084 36%	<b>19.4x</b> 9,036 35%	28.5x 6,158 28%	<b>25.3x</b> 6,945 27%	<b>25.7x</b> 6,814 27%	8%	7%
Judges Scientific plc		Dec-21	538	27	565	0.9x	<b>6.2x</b> 91 14%	<b>5.0x</b> 114 25%	<b>4.5x</b> 125 10%	28.3x 20 22%	18.9x 30 26%	16.0x 35 28%	<b>37.1x</b> 15 17%	20.4x 28 24%	<b>17.3x</b> 33 26%	17%	33%
Mettler-Toledo International Inc.		Dec-21	26,745	1,666	28,412	1.6x	10.3x 2,746 22%	8.8x 3,236 18%	8.6x 3,289 2%	<b>34.5x</b> 824 30%	27.1x 1,047 32%	25.5x 1,115 34%	<b>37.5x</b> 758 28%	<b>29.0x</b> 979 30%	27.2x 1,045 32%	9%	16%
PerkinElmer, Inc.		Jan-22	14,700	3,719	18,419	4.1x	5.4x 3,390 (8%)	<b>7.3x</b> 2,511 (26%)	<b>6.8x</b> 2,717 8%	16.5x 1,118 33%	<b>20.5x</b> 898 36%	<b>18.8x</b> 979 36%	17.7x 1,038 31%	23.9x 772 31%	21.4x 860 32%	(10%)	(6%)
Sartorius Aktiengesellschaft		Dec-21	21,357	2,061	23,975	1.7x	<b>8.3x</b> 2,897 38%	<b>6.5x</b> 3,680 27%	<b>6.0x</b> 3,994 9%	25.1x 957 33%	19.4x 1,238 34%	17.8x 1,344 34%	<b>30.5x</b> 786 27%	24.4x 984 27%	22.5x 1,066 27%	17%	19%
Thermo Fisher Scientific Inc.		Dec-21	180,098	23,550	203,807	2.3x	7.0x 28,958 23%	5.6x 36,434 26%	<b>5.6x</b> 36,595 0%	<b>21.0x</b> 9,704 34%	20.1x 10,131 28%	19.9x 10,231 28%	26.4x 7,710 27%	22.5x 9,048 25%	22.7x 8,975 25%	12%	3%
Waters Corporation		Dec-21	16,891	1,064	17,955	1.2x	8.7x 2,057 19%	<b>7.3x</b> 2,446 19%	7.1x 2,528 3%	<b>24.5x</b> 733 36%	<b>20.7x</b> 867 35%	20.0x 898 36%	28.8x 623 30%	<b>24.5x</b> 734 30%	<b>23.6x</b> 762 30%	11%	11%
Min Mean Median Max							4.6x 7.1x 7.0x 10.3x	4.3x 6.3x 6.6x 8.8x	4.1x 6.0x 6.3x 8.6x	16.5x 23.7x 23.2x 34.5x	17.4x 20.4x 19.7x 27.1x	16.0x 19.2x 19.1x 25.5x	17.7x 29.2x 28.6x 37.5x	20.4x 24.0x 24.1x 29.0x	17.3x 22.4x 22.6x 27.2x	3% 10% 10% 17%	3% 13% 11% 33%

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Source: CapIQ

#### **Test, Inspection &** EV/Revenue EV/EBITDA EV/EBIT 2 Year CAGR 2021-2023 **Certification services** Revenue (GBPm) EBITDA (GBPm) EBIT (GBPm) Revenue growth FRITDA % FRIT % Year End Date **Net Debt** EV (GBPm) Country 2023 2021 2022 2023 2021 2023 Sales EBITDA 2021 2022 2022 Company EBITDA (2022) (GBPm) (Cash) 3.4x 2.9x 2.7x 14.6 11.5x 10.4x 23.7 15.3x 13.7x **ALS Limited** Mar-22 3.340 735 3.939 2.1x 1.155 1.356 1.471 269 343 378 167 257 287 13% 19% 17% 17% 9% 23% 25% 26% 14% 19% 19% 1.0x 0.9x 0.8x 6.6x 5.6x 5.3x 14.9x 9.4x 8.8x 773 741 1,558 2.7 1,492 1,773 1,854 235 277 292 105 166 177 11% 11% 19% 5% 16% 16% 10% 7% 16% 7% 2.7x 2.3x 2.1x 13.4x 11.2x 10.5x 18.4x 14.1x 13.3x 4,184 840 610 847 4,963 5,234 1,004 1,067 798 19% 20% 15% 16% 5% 20% 20% 16% 2.4x 2.3x 2.3x 8.7x 9.5x 9.5x 12.1x 14.1x 14.3x Eurofins 13,758 1.6x 5,642 1,578 1,445 1,139 (4%) Dec-21 11,442 2,260 5,991 6,063 1,451 979 962 Scientific SE 16% 6% 289 24% 24% 20% 16% 16% 12.6x 10.5x 9.8x 44.2x 33.7x 31.6x 49.3x 33 4x 36.1x Exponent, Inc Dec-21 4 164 (117) 4 048 n/a 321 384 413 92 120 128 82 121 112 13% 18% 16% 200/ 20% 210/ 210/ 26% 320/ 270/ 2.8x 2.4x 2.3x 12.4x 10.9x 10.2x 17.4x 14.9x 13.9x 6,500 1,191 2,786 3,18 3,359 624 712 760 445 519 557 6% 22% 22% 23% 16% 16% 17% 0.7x 0.6x 0.6x 6.5x 5.9x 5.1x 20.5x 22.4x 15.4x Mistras Group, Dec-21 122 211 334 13% 572 500 598 51 57 65 16 15 22 15% 14% 5% 10% 10% 11% 3% 4% 3.3x 11.7x 22.6x 18.2x 2.8x 2.7x 14.6x 12.6x 17.0x SGS SA Dec-21 14.457 2.589 17.108 1.93 5.189 6.030 6.249 1.168 1.362 1.459 756 939 1.004 10% 12% 12% 16% 4% 23% 23% 23% 15% 16% 16% Min 0.7x 0.6x 0.6x 6.5x 5 6x 5.1x 12.1x 9.4x 8.8x 4% 10% 2.3x 2.0x 1.9x 11.0 9.6x 9.0x 18.5 15.5x 13.8 13%

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2.7x

3.4x

2.3x

2.9x

2.3x

2.7x

Highlighted values are considered as outliers and are not included in calculations

Source: CapIQ

Max

#### Public company valuations - Through the cycle (EV/LTM EBITDA)

#### **Sensors**

#### 20x 15x 10x Dec-22: 10.6x TTC: 10.9x 5> Jun-18 -90-unc 9 Jun-12 Mar-13 3 Sep-14 Jun-15 Mar-16 16 Sep-17 Mar-19 Dec-19 Sep-20 Jun-21 Dec-07 Dec-

#### Instrumentation - Industrials

12.4x

14.6x

10.9x

12.6x

10.2x

11.7x

18.4x

23.7x

14.9x

22.4x

13.9x

17.0x

10%

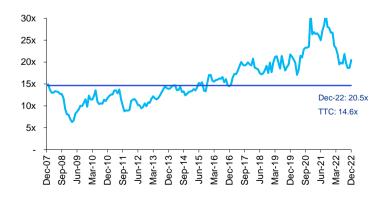
13%

12%

19%



#### Instrumentation - Life Sciences



#### **Test, Inspection & Certification services**



Median EBITDA — Median EBITDA through the cycle

#### **M&A Transaction History**

#### Sensors

Date	Target	Country	Target Description	Acquirer	Country	EV	EV/ EBITDA
May 22	OMEGA Engineering	<b>_</b>	Provider of a broad range of process measurement and control instrumentation to industrial	Dwyer Instruments (Arcline)	<b>\$</b>	US\$525m	20.5x
Jun 21	Photon Control Inc.	(*)	Designs, manufactures and distributes a range of optical sensors and systems to measure temperature and position	MKS Instruments, Inc.		US\$312m	15.6x
Jun 21	Diversified Technical Systems		Manufacturer of data acquisition systems and sensors for product and safety testing	Vishay Precision Group		US\$47m	5.9x
Apr 21	Xirgo Technologies Inc		Provides telematics & data insight solutions for transport & logistics end markets	Sensata Technologies		US\$400m	16.0x
Jan 21	Flir Systems		Designer, manufacturer and marketer of camera systems for a wide variety of thermography and imaging applications	Teledyne Technologies Inc		US\$7,800m	18.9x
Dec 20	MTS Systems Corporation		Supplier of advanced test systems, motion simulators and precision sensors	Amphenol Corporation		US\$1.7bn	14.0x
Dec 20	OptaSense Holdings, Ltd		Fiber optic distributed monitoring solutions	Luna Innovations Incorporated		£29m	13.0x
Oct 19	Sens-Tech Ltd		Manufacturer of x-ray and light detector modules	discoverIE Group plc		£58m	5.9x
Jun 19	Sensys Networks, Inc.		Provides integrated wireless traffic data systems and traffic management solutions	TagMaster AB		US\$16m	9.4x
Jun 19	First Sensor AG	•	Manufacturer of sensors, detectors and emitters	TE Connectivity Ltd.	0	€308m	14.5x
Apr 19	Positek Limited		Designer and manufacturer of linear, rotary, tilt and submersible sensors	discoverIE Group plc		£4.6m	7.7x
Oct 18	Resideo Technologies, Inc.		Home comfort and security solutions and wholesale distributor of security and low-voltage products	Spin off from Honeywel International Inc.		US\$3,259m	14.0x
Jan 17	Variohm Holdings Limited		Manufacturer of position, pressure and temperature sensors	discoverIE Group plc		£13.9m	7.0x
	Min						5.9x
	Mean						12.5x
	Median						14.0x
	Max						20.5x

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

#### Instrumentation

#### Industrials

Date	Target	Country	Target Description	Acquirer	Country	EV	EV/ EBITDA
Aug 22	CyberOptics Corporation		Developer and manufacturer of high-precision 3D optical sensing technology solutions	Nordson Corporation	<b>_</b>	US\$380m	18.5x
Jun 22	Industrial business segment of Roper tech.		Company engaged in designing and developing software and engineered products and solutions	CD&R		US\$5.1bn	19.6x
May 22	Dytran Instruments		Manufacturer of piezoelectric, MEMS-based and digital accelerometers	Spectris		US\$82m	15.8x
Jan 22	Zetec (Roper Technologies)		Zetec is engaged in nondestructive testing (NDT) solutions for critical inspection needs	Eddyfi/NDT (Novacap)	(*)	US\$350m	20.6x
Aug 21	NDC Technologies Inc.		Provider of precision measurement solutions for in-line manufacturing process control	Nordson Corporation		US\$180m	13.5x
Apr 21	Concurrent Real-Time, Inc.		Supplier of real-time operating systems for hardware-in-the-loop simulation applications	Spectris Plc		US\$167m	16.0x
Mar 21	Abaco Systems Inc		Provider of mission critical embedded computing systems for aerospace, defense and industrial applications	AMETEK Inc		US\$1,350m	13.5x
Dec 20	Brüel & Kjær Vibro (Spectris Subsidary)		Supplier of machinery protection & condition monitoring systems for rotating & reciprocating industrial machinery	NSK Ltd	•	€180m	20.0x
Jul 20	Microwave Vision SA (52.06%)	()	Designs, manufactures and sells microwave test systems	Groupe HLD		€145m	10.2x
Feb 20	Sensit Technologies		Manufacturer of gas leak detection instruments for natural gas, fire services and industrial applications	Halma		US\$51.5m	11.7x
Feb 20	L3Harris Technologies (Security & Detection)		Provides airport and critical infrastructure screening products and other industrial automation products	Leidos Holdings		US\$1bn	13.3x
Dec 19	BTG Group Limited (Spectris Subsidiary)		Provider of integrated, highly specialised process measuring instruments for the paper industry	Voith GmbH		€319m	11.5x
Oct 19	Gatan, Inc.		Manufacturer of instrumentation used to enhance the operation and performance of electron microscopes	AMETEK, Inc.		US\$925m	14.9x
Oct 19	Rudolph Technologies		Manufacturer of process control metrology and defect inspection systems used by semiconductor manufacturers	Naometrics		US\$769m	13.4x
Aug 19	3M Gas and Flame Detection	1	Manufacturer of gas and flame detection products	Teledyne Technologies		US\$230m	11.0x
Nov 18	Spectro Scientific		Supplier of oil, fuel and fluid analysis instruments to industry, military and laboratories	AMETEK, Inc.		US\$190m	16.5x
	Min						10.2x
	Mean						15.0x
	Median						14.2x
	Max						20.6x

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

#### **M&A Transaction History**

#### Instrumentation - Life Sciences

Date	Target	Country	Target Description	Acquirer	Country	EV	EV/ EBITDA
Aug 22	Frontage Clinical Services(88.1%)		Offers services in analytical testing and formulation development, drug metabolism and pharmacokinetics	Frontage Laboratories, Inc.		US\$15m	11.4x
Dec 21	Food Safety Business of 3M		Food safety business of 3M which sells test kits and other products to help foodmakers monitor sanitation & allergies	Neogen		US\$5.3bn	32.0x
Nov 21	SP Industries		Designer and manufacturer of high-grade biopharma processing equipment & life sciences equipment	ATS	(*)	US\$445m	15.3x
Jul 21	Luminex Corporation		Develops, manufactures and sells biological testing technologies and products	DiaSorin S.p.A.		US\$1.8bn	19.8x
Sep 20	Advanced Instruments		Provider of scientific and analytical instruments	Patricia Industries	<b>(</b>	£608m	24.1x
Oct 19	Danaher Corporation (Life Science business)		Life Sciences business of Danaher Corporation (FortéBio, Pall-Chromatography and SoloHill)	Sartorius AG		US\$750m	20.0x
Aug 19	BioTek Instruments Inc		Design, manufacture and distribution of innovative life science instrumentation	Agilent Technologies		US\$1.17bn	22.0x
Feb 19	Roper Technologies (Scientific-Imaging)		Scientific Imaging business (analytical and scientific instrumentation) of Roper Technologies, Inc.	Teledyne Technologies		US\$225m	11.0x
Feb 19	GE Biopharma		Provider of instruments, consumables and software that support the workflows of drug manufacturers	Danaher		US\$21.4bn	17.0x
Dec 17	EUROIMMUN Medical Laboratory		Develops, produces and distributes devices, software and consumables for human and veterinary medical diagnostics	PerkinElmer, Inc.		€1.2bn	19.2x
Sep 16	FEI Company		Supplier of instruments for nanoscale imaging, analysis and prototyping	Thermo Fisher Scientific		US\$4.4bn	19.3x
Apr 16	Newport Corporation		Supplier of technology products to scientific research, microelectronics, life and health sciences industries	MKS Instruments		US\$980m	17.5x
	Min						11.0x
	Mean						19.4x
	Median						19.3x
	Max						32.0x

Source: CapitalIQ Prowess, MergerMarket and KPMG intel

#### **Test, Inspection & Certification services**

Date	Target	Country	Target Description	Acquirer	Country	EV	EV/ EBITDA
Aug 21	Institute of Calibration & Technology	(•)	Provides measuring instrument caliberations, repair of dysfunctional measuring instruments	Trescal	()	AUD 60m	9.2x
May 21	SAI Global Assurance		Provides assurance services, including management systems certification and second party audits	Intertek Group Plc		AUD 855m	15.5x
Dec 20	SYNLAB Analytics & Services B.V.		Provides inspection, verification, testing and certification and other laboratory services	SGS SA	•	£491m	16.2x
Dec 20	Millbrook (Spectris Subsidary)		Provides vehicle test, validation and engineering services to automotive, transport, tyre and petrochemical industries	UTAC CERAM		£133m	12.0x
Dec 20	QPS Evaluation Services	(*)	Product certification company for a wide range of industrial, medical and electrical & electronic (E&E) products	Applus Services S.A	A	€42m	9.0x
Apr 20	LGC Group		Provider of proficiency testing schemes, genomics reagents and instrumentation, research and measurement services	Cinven Partners LLP and Astorg Partners		£3.0bn	17.5x
Feb 19	Onstream Pipeline Inspection	(*)	Provider of pipeline inspection and data analytics services	MISTRAS Group		US\$190m	11.9x
Aug 18	Covance Inc.		Provider of innovative product design and product integrity services	Eurofins Scientific		US\$670m	23.6x
Aug 18	Alchemy Systems		Provider of web-based training and communication platform focusing on workplace injuries and food safety	Intertek Group Plc		US\$480m	21.8x
Jan 18	CLS		Provider of scientific laboratory and consultancy services	Spectris		£163m	18.0x
Jan 18	Trescal SAS		Engaged in providing verification, calibration and measurement services	Omers Private Equity	(*)	€670m	14.9x
Dec 17	EAG Laboratories		Surface analysis and materials characterisation provider delivering innovative analytical services and solutions	Eurofins Scientific		US\$780m	11.8x
Jun 17	Exova Group plc		Provider of testing, calibration and consulting services	Element Materials Technology		US\$1.06bn	12.5x
Sep 16	Millbrook Group		Vehicle test, validation and engineering service provider for the automotive markets	Spectris Plc		£122m	12.5x
Apr 16	WIL Research Laboratories		Provider of safety assessment and manufacturing services to biopharmaceutical and agricultural companies	Charles River Laboratories		US\$585m	12.9x
	Min						9.0x
	Mean						14.6x
	Median						12.9x
	Max						23.6x

#### KPMG's global test & measurement credentials

























































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