

Trex Communicator Comparison Matrix

Features	COMMUNICATOR										DO-IT-YOURSELF	
	Emerson Trex Device Communicator	Emerson 475 Field Communicator	Honeywell MCT202	ABB DRH05	Mariam 5150X	GE DRUCK DPI620-IS	GE DRUCK DPI620 GenII	Fluke 754	Beamex MC6	Procomsol DevCom2000	Teknikol Commander	
Product Image												
Price	\$7,010 (HART 475 Equivalent) \$6,070 (HART w/ Loop Power) \$11,865 (HART/FF w/ Loop Power)	\$6,269 (Typical HART) to \$6,164 Typical (HART/FF)	Information not available	\$3,812.00	\$5,390.00	\$ 6,328.00	\$ 5,950.00	\$ 6,500.00	approx. \$ 20,000.00	\$800 (software only)	\$200 for software only	
Supported Languages	English, Chinese, German, French, Japanese, Portuguese, Russian in future	English, Chinese, German, French, Japanese, Portuguese, Russian	OS Languages: English	English, Italian, Japanese	English, Chinese, German, Russian, Japanese, French, Italian, and Spanish	English, French, German, Italian, Chinese, Russian, Portuguese, Spanish	English, Chinese, French, German, Italian, Portuguese, Russian, Spanish, Dutch, Japanese	English, French, German, Spanish, Italian	English but said to have multilingual user interface	English	English	
Supported Protocols	HART, WirelessHART, and FOUNDATION fieldbus	HART, WirelessHART, and FOUNDATION fieldbus	Honeywell DE (Digitally Enhanced) and HART (Rev 5, 6, wired 7)	HART	HART (Rev 5, 6, 7)	HART only	HART and FOUNDATION fieldbus	HART only	HART, FOUNDATION fieldbus, and PROFIBUS PA	HART only	HART	
Field Upgradeable (firmware/software)	Yes	Yes	Yes	Yes	Yes, firmware is available via its webpage	Yes, firmware is available via its webpage	Yes, firmware is available via its webpage	Information not available	Yes, firmware is available via its webpage	Yes, with subscription (\$200)	Yes, firmware is available via its webpage	
Field Upgradeable (DD files)	Manual DD Updates Automatic DD Updates with Support	3 years; Upgradeable via net; fully tested DDs	Download updates via subscription service	Yes; License required for non-ABB DDs.	Option 1: Download DDs from Mariam Option 2: Get DDs from the manufacturer	DDs are posted to the website; FOC	DDs are posted to the website; FOC	Information not available	DDs are posted to the website	Yes, with subscription (\$100)	DDs are posted to the website	
Offline configuration capability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Certifications & Approvals	OMAN - TRA TRA/TA-R008B/11 D060273 RAITE (1899/95/EC) Directive 1899/95/EC, ETSI EN 300328-2006-10, and IEC 2209-2:2007 Low Voltage (2006/95/EC) EN 61010-1:2001 Electro Magnetic Compatibility (2004/108/EC) EN 61326-1:2006 and ETSI EN 301489-17:2002-08 ATEX Intrinsic Safety ATEX Directive (94/9/EC) EN 60079-0:2012, EN 60079-1:2012, and EN 60079-26:2007 Certification No.: BV5 09 ATEX E 022 II 2 G (I GD) Ex ia [ja Ga] [ia Da IIIc] IIC T4 Gb (-10°C < Ta < +50°C) CE 0108 IECEx Certification No.: IECEx BV5 10.0094 Ex ia [ja Ga] [ia Da IIIc] IIC T4 Gb (-10°C < Ta < +50°C) Canadian Standards Association (CSA) Class I, Zone 0, Ex ia IIC T4 (Ta = 50°C) Class I, Division 1, Groups A, B, C, and D and Class I, Zone 0, A, Ex ia IIC T4 (Ta = 50°C) European Union Directives Low Voltage Directive 2006/95/EC EN 60950-1:2001 + A11 EMC Directive 2004/108/EC EN1204-3:2000 RoHS (2002/95/EC) directive WEEE (2002/96/EC) directive Japanese Directives DENANPSE RED (2014/53/EU)	OMAN - TRA TRA/TA-R008B/11 D060273 RAITE (1899/95/EC) Directive 1899/95/EC, ETSI EN 300328-2006-10, and IEC 2209-2:2007 Low Voltage (2006/95/EC) EN 61010-1:2001 Electro Magnetic Compatibility (2004/108/EC) EN 61326-1:2006 and ETSI EN 301489-17:2002-08 ATEX Intrinsic Safety ATEX Directive (94/9/EC) EN 60079-0:2012, EN 60079-1:2012, and EN 60079-26:2007 Certification No.: BV5 09 ATEX E 022 II 2 G (I GD) Ex ia [ja Ga] [ia Da IIIc] IIC T4 Gb (-10°C < Ta < +50°C) CE 0108 IECEx Certification No.: IECEx BV5 10.0094 Ex ia [ja Ga] [ia Da IIIc] IIC T4 Gb (-10°C < Ta < +50°C) Canadian Standards Association (CSA) Class I, Zone 0, Ex ia IIC T4 (Ta = 50°C) Class I, Division 1, Groups A, B, C, and D and Class I, Zone 0, A, Ex ia IIC T4 (Ta = 50°C) European Union Directives Low Voltage Directive 2006/95/EC EN 60950-1:2001 + A11 EMC Directive 2004/108/EC EN1204-3:2000 RoHS (2002/95/EC) directive WEEE (2002/96/EC) directive Japanese Directives DENANPSE RED (2014/53/EU)	European EMC Standards: INTRINSIC SAFETY ATEX Europe approval: II 1 G Ex ia IIC T4 Ga IEC Ex approval: Ex ia IIC T4 Ga NEPSI China (PENDING): Ex ia IIC T4 FM Approvals US Nonincendive: Class I, Div. 2, Gr. A, B, C, D, T4 Intrinsically Safe: Class I, Div. 1, Gr. A, B, C, D, T4 Nonincendive - Class I, Div 2 Group A, B, C, D ATEX/Canada: Class I, Zone 0, A, Ex ia IIC T4 Class I, Zone 0, A, Ex ia IIC T4 FM Approvals Canada: Class I, Zone 0, A, Ex ia IIC T4, GOST (Russia, Kazakhstan, Belarus), Immetro (Brazil) based on ATEX	CE Marked BS EN 61326-1:2006 BS EN 61010 : 2001 EN 60079-0:2009 EN 60079-1:2007 IECEx BAS 10.0002X Ex II 1 G Ex ia IIC T4 Ga (-10°C < Ta < +40°C)	EN 61326-1:2006	EN/IEC 61010-1:2010, CAN/CSA C22.2 No. 61010-1-04, ANSIIUL 61010-1:2004	Directive 2006/95/EC, EN 61010-1:2001 Directive 2004/108/EC, EN 61326-1:2006 IEC 60068-2-32: 1 meter (3.28 ft), IEC 60068-2-64, Random, 2 g, 5 ... 500 Hz; Max altitude - 3,000 m (9,842 ft)	depends on the PC or tablet to be used	depends on the PC or tablet to be used			
Ruggedness	IP 54	IP51	IP65	Information not available	IP51	IP65	IP54	IP52	IP65	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Screen size (diagonal measure)	5.7 inches	5.7 inches	3.5 inches	Information not available	2.06 x 1.07 inches	4.3 inches	4.3 inches	Information not available	5.7 inches	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Screen resolution, in pixels	640x480 pixels; high resolution color resistive touchscreen	14 VGA (480 by 320 pixels); transreflective color touch screen, Anti-Glare coated.	240 x 320 pixels; transreflective TFT color with LED backlight, 64k color, touch screen	128 x 64 pixel graphic display with backlight.	1.9 GHz	480 x 272 pixels; OLED Colour display with touchscreen (For use with gloves & No stylus required) Landscape Orientation, Multi-level Backlight	480 x 272 pixels; OLED Colour display with touch-screen	480 x 800 pixels LCD; Colour display with touch-screen	640 x 480 TFT LCD module; 5-wire resistive touch screen	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Processor	800 MHz; 1M353 Cortex A8 / Freescale	800MHz, max 133 MHz; Hitachi SH3	Intel PXA270 520 MHz	Information not available	1 GHz	Information not available	Information not available	Information not available	Information not available	Information not available	Information not available	
Operating System	Windows Embedded Compact 2013	Windows CE 3.2	Microsoft Windows Mobile 5.0	Information not available	Windows CE 6.0	Windows CE	Windows CE	Information not available	Information not available	Information not available	Information not available	
Memory capacity	512 MB DDR3 SDRAM 8 GB NAND Flash and 32 GB extended flash	32MB RAM, 32MB Memory Internal Flash, 32GB Application and driver storage	128 MB ROM and 64 MB SDRAM 1 GB San Disk Flash Memory card	2 GB SD Card	256 MB RAM, 512MB Flash 4GB Application & driver storage on SD Card. Capable of reading up to 64GB SD	1GB of fixed internal memory, 4 GB expansion, USB memory stick	1GB of fixed internal memory, 4 GB expansion, USB memory stick	Information not available	USB Flash memory available	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Devices Supported	1366 (HART), 330 (FF)	1366 (HART), 330 (FF)	ST 3000, ST 800 and ST 700 pressure and STT 3000 temperature transmitters, and any HART device with published DDs	Standard unit supports ABB devices only with DDs. License required to support non-ABB	All HART field devices can be configured	Full support for all HART devices	Full support for all HART devices	selected HART only	1,365 HART, 395 FF, 70 PROFIBUS PA	most HART devices from HCF website	Information not available	
Advance Diagnostics	ValueLink Mobile, Loop Diagnostics, FF Diagnostics	ValueLink Mobile	None	None	None	None	None	None	None	None	None	
Supports Multi-Drop System	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	unknown	Yes	
Communication	Bluetooth, Wi-Fi, USB, and NFC	4A, Bluetooth, Card Reader	USB	USB	USB connection through charging base	USB RS232 (using IO620-USB-RS232) USB memory stick Micro SD memory card	USB Type A, USB Type Mini B, WiFi IEEE 802.11g, Bluetooth	USB	Ethernet, 2 x USB-A, USB-B	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Power Module and Power Supply	Rechargeable Lithium-Ion Power module. Power supply options: US, EU, UK, AU plugs	Rechargeable Lithium-Ion Power module. Power supply options: US, EU, UK plugs	Rechargeable Lithium-Ion battery plus new charger options (US, EU, AU, UK)	4 AA (disposable & rechargeable) 60 hours (with minimum backlight) Standard charger	Rechargeable Li-Ion module 36.0 Watt Hours 940mAh @ 3.7VDC	NiMH battery; Capacity: 4000 mAh (typical); Nominal voltage: 3.6 V. Charge temperature: 0° to 40°C (32° to 104°F) Discharge temperature: -10° to 40°C (-14° to 104°F)	Lithium-Polymer battery; Capacity: 5440 mAh (minimum), 5280 mAh (typical); Nominal voltage: 3.7 V. Charge temperature: 0° to 40°C (32° to 104°F) Discharge temperature: -20° to 60°C (-4° to 140°F)	Lithium Ion, 7.2 V dc, 30 Wh	Rechargeable lithium-ion polymer, 4200 mAh, 11.1V	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Dimensions	7.75" x 5.5" inches	(10 x 3 to 5.3 x 1.7) in	(8 x 2.875 x 1.5) in	8.52 x 4.69 x 1.61-2.59	11.9 x 5.6 x 1.9 in	183 x 114 x 55 mm (7.2 x 4.5 x 2.2 in)	183 x 114 x 42 mm (7.2 x 4.5 x 1.7 in)	Height = 63.35 mm (2.49 in) x Width = 136.37 mm (5.37 in) x Length = 244.96 mm (9.65 in) x 2.24in	Extended case: 200 x 230 x 70mm (7.87 x 9.06 x 2.76in) Flat case: 200 x 230 x 57mm (7.87 x 9.06 x 2.24in)	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Weight	Approximately 1.33 kg (2.9 lbs) with battery	Approximately 0.75kg (1.65 lbs) with battery	200g (0.4409 lb)	950 g (2.09 lbs)	0.95 kg (2.1 lbs) with battery	1.1 kg (2.4 lb) - battery included	0.75 g (1.3 lb) - battery included	1.23 kg (2.71 lb) (Batteries included)	Extended case: 1.5 ... 2.0 kg (3.3 ... 4.4 lb) Flat case: 1.5 kg (3.3 lb)	depends on the PC or tablet to be used	depends on the PC or tablet to be used	
Keyboard Type	Full QWERTY touchscreen keyboard	25 keys including 4 action keys, 12 alphanumeric keys, tab key, function key, backlight key, power key, and 4 cursor control (arrow) keys; membrane design with tactile feedback	On/off - switch, reset keys, 5 programmable function keys, 5-way navigation field	single sheet molded dome switches with tactile feedback with: - 4 keys for navigation - 7 single function keys for editing and operation - 12 multifunction keys for alphanumeric and symbols	Molded Keyboard design with tactile feedback 52 keys including qwerty keys	Information not available	Information not available	Information not available	Membrane keyboard; LED backlight, adjustable brightness	depends on the PC or tablet to be used	depends on the PC or tablet to be used	