RADIODETECTION®

PCMx™ transmitter specification

Tx-25 PCM and Tx-150 PCM



SPX TECHNOLOGIES

PCMx Tx-25PCM and Tx-150PCM Transmitter Specification

1. Product Summary

1.1 Product Overview:	Tx-150PCM is a constant current transmitter capable of 3 Amp output Tx-25PCM is a constant current transmitter capable of 1 Amp output
1.2 Product Descriptions:	Pipeline Current Mapper transmitter Constant current transmitter
1.3 Intended Use:	Use with the Radiodetection PCMx system to: ▪ Detect and pinpoint coating faults and shorts on buried pipes and cables ▪ Locate the position / path, and centerline depth of buried pipes and cables ▪ Create survey records of buried pipes and cable locations ▪ Can also be used with RD Precision Locator range for long distance cable and pipe locating
1.4 Standard Equipment:	Transmitter Integrated Li-Ion rechargeable battery pack, and mains charger (Tx-25PCM only) AC mains cable Length: 2 meters/ 6.6 feet Output cable Length: 3 meters/ 9.8 feet DC input cables (Tx-150PCM only) Length: 3 meters/ 9.8 feet

2. Physical Characteristics

	Tx-25PCM	Tx-150PCM
2.1 Construction	High impact thermoplastic injection molding	High impact thermoplastic injection molding
2.2 Ruggedness	Complies with EN 60950-1	Complies with EN 60950-1
2.3 IP ratings[1]	Lid open: IP54 Lid closed: IP67	Lid open: IP54 Lid closed: IP67
2.4 Dimensions	Metric: 406mm x 330mm x 174mm Imperial: 16” x 13” x 6.8”	Metric: 470mm x 370mm x 190mm Imperial: 18.5” x 14.5” x 7.5”
2.5 Weight	Metric: 8.1kg Imperial: 17.8lb	Metric: 16.2kg Imperial: 35.7lb
2.6 Operating temperature:	Metric: -10°C to +50°C Imperial: 14°F to +122°F	Metric: -10°C to +50°C Imperial: 14°F to +122°F
2.7 Storage temperature:	Metric: -20°C to +70°C Imperial: -4°F to +158°F	Metric: -20°C to +70°C Imperial: -4°F to +158°F

3. Performance

	Tx-25PCM	Tx-150PCM
3.1 Maximum output power	25 Watts	150 Watts
3.2 Maximum output voltage	100V Peak	100V Peak
3.3 Maximum output current	1 Amp	3 Amps

4. Operating Modes

	50Hz regions	60Hz regions
4.1 ELF	4Hz + 128Hz	4Hz + 98Hz
4.2 ELCD	4Hz + 8Hz + 128Hz	4Hz + 8Hz + 98Hz
4.3 LFCD	4Hz + 8Hz + 640Hz	4Hz + 8Hz + 512Hz
4.4 8 kHz (Tx-25PCM only)	8192Hz	8192Hz

5. Output Settings

	Maximum RMS output for each frequency by operating mode								
	ELF		ELCD			LFCD			8kHz (Tx-25PCM only)
	4Hz	98/128Hz	4Hz	8Hz	98/129Hz	4Hz	8Hz	512/640Hz	
30mA *(Tx-25PCM only)*	30mA	56mA	30mA	26mA	30mA	30mA	26mA	30mA	30mA
60mA *(Tx-25PCM only)*	60mA	111mA	60mA	51mA	60mA	60mA	51mA	60mA	60mA
100mA	100mA	186mA	100mA	86mA	100mA	100mA	86mA	100mA	100mA
600mA	600mA	1.1A	600mA	514mA	600mA	600mA	514mA	600mA	600mA
1A	1A	1.9A	1A	857mA	1A	1A	857mA	1A	1A
2A *(Tx-150PCM only)*	2A	3.7A	2A	1.7A	2A	2A	1.7A	2A	N/A
3A *(Tx-150PCM only)*	3A	5.6A	3A	2.6A	3A	3A	2.6A	3A	N/A

6. Displayed Information

Accessory	Tx-25PCM	Tx-150PCM
6.1 LED Indicators	▪ Output voltage level ▪ Voltage limit ▪ Power limit ▪ Over temperature ▪ OK (unit working correctly) ▪ Power supply connected ▪ Battery charging ▪ Battery charge temperature	▪ Output voltage level ▪ Voltage limit ▪ Power limit ▪ Over temperature ▪ OK (unit working correctly)
6.2 LCD on start up	▪ Software version ▪ Location frequencies used ▪ Last calibration date	▪ Software version ▪ Location frequencies used ▪ Last calibration date
6.3 LCD in use	4Hz output current level, ELF, ELCD and LFCD modes 8kHz output current level, 8kHz mode	4Hz output current level on all modes

7. Power Options

Accessory	Tx-25PCM	Tx-150PCM
7.1 AC	110/120V , 60Hz or 230/240V, 50Hz	110/120V, 60Hz or 230/240V, 50Hz
7.2 DC	N/A	20-50V
7.3 Rectified	N/A	15-35Vrms rectified ac 100/120Hz
7.4 Battery type	Integrated Li-Ion battery	N/A
7.5 Battery life	8 hours, 600mA output 4 hours,1A output	N/A
7.6 Battery charging time	3-4 hours to 80%, maintenance trickle charge thereafter	N/A

8. Warranty and Maintenance

8.1 Manufacturer's warranty duration	**1 year**
8.2 Recommended calibration and maintenance schedule:	**Annual, or at the beginning / end of a lease period if earlier**
8.3 Storage recommendation:	**Store in a clean and dry environment.** **Ensure all terminals and connection sockets are clean, free of debris and corrosion and are undamaged**
8.4 Cleaning:	**Clean with a soft, moistened cloth. Do not use:** **▪ Abrasive materials or chemicals** **▪ High pressure jets of water**

9. Certification and Compliance

9.1 Standards:		
Safety:	**EN 69050-1: 2013**	**EN60950-1: 2006 + A1:2010+ A11:2010 + A12:2012**
EMC:	**EN 61326-1: 2013**	**EN61326-1: 2006**
9.2 European directives	**Low voltage: 2014/35/EU** **EMC: 2014/30/EU** **ROHS: 2011/65/EU**	**Low voltage: 2006/95/EC** **EMC: 2004/108/EC** **ROHS: 2011/65/EU**

RADIODETECTION®

SPX TECHNOLOGIES

Our Mission

Provide best in class equipment and solutions, to prevent damage to critical infrastructure, manage assets and protect lives.

Our Vision

To be the world's leader in the management of critical infrastructure and utilities.

Our locations



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Raymond, ME
Kearneysville, WV

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Vaughan, ON
Mississauga, ON

Europe

United Kingdom **HQ**
France
Germany
The Netherlands

Asia Pacific

India
China
Hong Kong
Indonesia
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