

iRCD Pro

Vertechs iRCD Pro is an all-electric integrated wellhead pressure control system built on intelligent RCD technology. It integrates RCD and MPD manifold functions into a single compact unit, enabling conventional rigs to perform MPD operations with remote support powered by IoT connectivity. The system reduces equipment footprint by 60% – 75%, lowers weight by over 50%, shortens installation and maintenance time, and minimizes crew requirements, enhancing both efficiency and safety.

FEATURES

- Enable transition from SBP to WBP
- Integrate core functions of iRCD and IPC-MPD systems in a compact system ($< 4 \text{ m}^2$) with ± 15 psi pressure control accuracy
- Reduce deployment time by 60%, crew by 50%
- Applicable to land rigs, modular rigs, and jack-up rigs



SPECIFICATIONS

iRCD Pro SPECIFICATIONS			
Design & Manufacture Standard	API 16RCD, 16C, 16A	Latching System Actuator	Electric (Low-voltage DC, Explosion-proof, Non-decoupled)

Max. Static Pressure	5,000 psi	RCD	iRCD Spec.
Bypass Line Qty	3 – 4 No. (Customized)	Connection Size	4 1/16 in
Valves Qty	9 – 10 No. (Customized)	Orifice Size	2 in / 3 in
Footprint	< 4m ²	Pressure Control Precision	±15 psi
Packing Elements	Single / Dual	Lubricating & Cooling	Self-lubricating

iRCD SPECIFICATIONS			
Design & Manufacture Standard	API 16RCD	Latching System Actuator	Electric (Low-voltage DC, Explosion-proof, Non-decoupled)
Max. Static Pressure	5,000 psi	Max. Dynamic Pressure	2,500 psi
Bearing Assembly	8 1/4 in	Bottom Flange	13 5/8 in
Housing Max. Outlet	7 1/16 in	RPM	0 – 200 rpm
Housing Height	46 – 53 in	Weight	1.5 – 3 T
Packing Elements	Single / Dual	Lubricating & Cooling	Self-lubricating

IPC-MPD SPECIFICATIONS			
Design & Manufacture Standard	API 16C	Actuator	Electric (Low-voltage DC, Explosion-proof)
Pressure Rating	5,000 psi	Pressure Control Precision	±15 psi
Connection Size	4 1/16 in	Orifice Size	3 in / 2 in

Contact Us

engineering@vertechs.com

Chengdu | Dammam | Houston | Calgary | Hong Kong

Disclaimer :

This document and any files transmitted with it are for use between Vertechs Group and external partners related to the Group's business. Unauthorized use is prohibited, and the dissemination, copying, or distribution of this document and its contents is strictly forbidden until the information becomes public or loses its commercial value. Violators will be held legally responsible.

2025 Copyright © Vertechs Group. All rights reserved.

www.vertechs.com