Rig Comm Protocol List

IADC Advanced Rig Technology
Guidelines & Reliability Subcommittee

			Application					Drilling Control Systems								Subsea Sytems			DP Systems		Power Systems			
Hardware Layer	Protocol	Speed	Sensor Level	Tool-to-tool	SCADA	Inter-System	Mgmt Systems	NOV Amphion	NOV Cyberbase	NOV V-ICIS	Aker MH DrillView	Hiltec Products Drilling	Omron Oilfield & Marine	Canrig	TTS-Sense	GE Hydril	Drilling Controls Inc. (Type 80)	Cameron	L3 Communications	Kongsberg	Caterpillar	Wartsila	ABB Breakers - Generator SWG	ABB VFDs
Wired																								
4-20mA Digital	HART	1.2K	●									●												
Serial RS232, RS485	Modbus	4.8K-115K	●	●	●	●							●	●	●	●	●	●	●	●	●		●	●
Serial RS232, RS485	Proprietary	4.8K-115K	●	●	●	●	●			●				●	●	●	●		●	●	●			
Serial RS485	AB-Data Hwy	9.6K-56K	●	●	●	●								●					●					
Serial RS485	Profibus FDL	56K-10M	●	●	●				●	●					●									
Serial RS485	Profibus DP	56K-10M	●	●	●	●		●	●	●		●	●	●	●	●		●	●	●			●	●
Serial RS485	Profibus PA	56K	●																					
Serial TSP, Fiber	Foundation Fieldbus	31.25K										●												
Serial RS485	Devicenet	56K-10M	●	●	●	●							●	●					●	●			●	●
Serial	Canbus	56K-10M	●	●	●	●								●				●			●			●
Serial	OPC - DA	10/100M												●										
Serial	NMEA 0183	4.8K-38.4K	●		●	●								●						●	●			
Serial	NMEA 2000 CAN	256K	●		●	●								●						●				
Serial RS232C	WITS	56k			●	●	●			●					●									
Coax/Fiber	Control Net	5M	●	●	●	●								●										●
Arcnet Token Ring	Arcnet	100M	●	●	●	●	●									●								
Ethernet 10/100 BaseT	WITSML	10/100M			●	●	●								●									
Ethernet 10/100 BaseT	Modbus	10/100M	●	●	●	●	●	●		●			●	●	●	●	●		●	●	●	●		●
Ethernet 10/100 BaseT	Devicenet	10/100M	●	●	●									●										
Ethernet 10/100 BaseT	Profinet - IRT	10/100M	●																					
Ethernet 10/100 BaseT	Profinet - IO	10/100M	●	●	●							●			●									●
Ethernet 10/100 BaseT	Profinet - CBA	10/100M			●	●	●					●												
Ethernet 10/100 BaseT	Open UDP	10/100M						●	●					●	●	●			●					
Ethernet 10/100 BaseT	HTTP	10/100M						●		●	●	●	●	●	●	●	●	●			●			
Ethernet 10/100 BaseT	FTP	10/100M																						
Ethernet 10/100 BaseT	OPC/DA	10/100M			●	●				●					●					●				
Ethernet 10/100 BaseT	OPC/UA	10/100M		●	●	●	●																	
Ethernet 10/100 BaseT	Proprietary	10/100M								●				●	●	●	●		●	●	●			
Wireless																								
Ethernet 802.11 a/b/g/h	All Ethernet Above	11/54M												●					●					
Bluetooth	2.4GHZ	3M																					●	
802.45.115 Zigbee	Zigbee																							