

Point of Manufacture – IRN20H-CC, IRN25H-CC, IRN30H-CC, IRN40H-CC (Campbellsville, US)
 IRN20H-TAS, IRN25H-TAS, IRN30H-TAS, IRN40H-TAS (Campbellsville, US)
 IRN15K-CC, IRN18K-CC, IRN22K-CC, IRN30K-CC (Unicov, Czech Rep)
 IRN15K-TAS, IRN18K-TAS, IRN22K-TAS, IRN30K-TAS (Unicov, Czech Rep)

MODBUS REGISTER LISTING

Table 1: Modbus RTU Register Map

Register (40XXX)	Variable	R/W	Par. Ref.	Description
001	Control/Status	R/W	-	See Table 2 Below
003	Dryer Discharge Pressure	R	2013	Pressure in selected units PSI = 0. KPa = 0. BAR = 0.0
004	Aftercooler Discharge Pressure	R	2012	Same as 003
020	Percent of Load	R	2072	0. %
025	Motor Speed	R	1617	0. RPM
026	Motor Current	R	1614	0.00 A
028	DC Bus Voltage	R	1630	0. V
030	Motor Voltage	R	1612	0.0 V
031	Package KW	R	1610	0.00 KW
032	KW Hours	R	1502	0. KW
033	MW Hours	R	1502	0. MW
053	Energy Savings (w/ dec)	R	2077	0.
054	Energy Savings (w/o dec)	R	2077	0.00
055	Lifetime Energy Savings (w/ dec)	R	2071	0.
056	Lifetime Energy Savings (w/o dec)	R	2071	0.00
060	Time to Service Percentage	R	2075	0. %
064	Total Hours (< 10000)	R	1501	Hours under the 10000 hour overflow limit
065	Total Hours (> 10000)	R	1501	Hours over the 10000 hour overflow limit
096	Language Selection	R	0001	See Table 3 Below
097	Units of Measure	R	0301	Current pressure unit selection 0 = PSI 1 = KPa 2 = BAR
112	Target Pressure	R/W	0303	Same as 003
113	Auto Stop Pressure	R/W	2001	Same as 003
116	Energy Rate	R	2011	0.000
121	VFD/Fixed Speed Mode	R/W	2026	Local mode control selection 0 = VFD 1 = Fixed
122	Remote Control Off/On	R	2010	Remote control enable 0 = Off 1 = On
123	PORO Off/On	R	2008	PORO enable 0 = Off

				1 = On
124	PORO Time	R/W	2009	0. s
125	Scheduled Start/Stop Off/On	R	2002	Scheduled start/stop enable 0 = Off 1 = On
129	Scheduled Start Hour	R/W	2003	0. h
130	Scheduled Start Minute	R/W	2003	0. min
131	Scheduled Stop Hour	R/W	2004	0. h
132	Scheduled Stop Minute	R/W	2004	0. min
133	Modbus Protocol Off/On	R	0830	Modbus Protocol Enable 0 = Off 1 = On
134	Modbus Address	R	0831	
252	Part Number	R	-	Upper 16 bits
253	Part Number	R	-	Lower 16 bits
254	Software Version	R	1543	0.00
255	Last Generated Warning Code	R	-	
256	Last Generated Alarm Code	R	-	
257-271	Alarm History: Alarm Number	R	1530	
272-286	Alarm History: Month	R	2090	
287-301	Alarm History: Date	R	2090	
302-316	Alarm History: Year	R	2090	
317-331	Alarm History: Hour	R	2090	
332-346	Alarm History: Minute	R	2090	
347-361	Alarm History: Aftercooler Pressure	R	2091	Pressure in unit corresponding to units of measure register PSI = 0. KPa = 0. BAR = 0.0
362-376	Alarm History: Dryer Pressure	R	2092	Same as 272-286
377-391	Alarm History: Hour Meter	R	2093	Compressor run time since last service 0. hours
392-406	Alarm History: Control/Status Word	R	2094	See Table 2 Below
407-421	Alarm History: Percent of Load	R	2095	0. %
422-436	Alarm History: Total Power	R	2096	0.00 KW
437-451	Alarm History: Heatsink Temp.	R	2097	0. °C
452-466	Alarm History: Ambient Temp.	R	2098	0. °C
467-481	Alarm History: Motor Speed	R	2086	History of last graph point 0. RPM
482-496	Alarm History: Motor Voltage	R	2087	History of last graph point 0.0 V
497-511	Alarm History: Motor Current	R	2088	History of last graph point 0.0 A
512-526	Alarm History: DC Bus Voltage	R	2089	History of last graph point 0. V
527-541	Alarm History: Units of Measure	R	2099	Pressure unit at time of alarm 0 = PSI 1 = KPa 2 = BAR

Table 2: Control / Status Word Register Details

Bit Number	Variable	R/W	Description
0	Local/Host Mode	R/W	Read: 0 = Host mode disabled 1 = Drive in serial host mode Write: 0 = Disable serial control 1 = Enable serial host control
1	Stop/Run	R/W	Read: 0 = Stop has been generated 1 = Start has been generated Write: (host mode required) 0 = Generate serial stop command 1 = Generate serial start command
2	Unload/Load	R/W	Read: 0 = Drive currently unloaded (Stopped in Auto Restart) 1 = Drive currently loaded (Normal run control) Write: (host mode required) 0 = Unload the drive 1 = Load the drive
3	Operating at Minimum Speed	R	0 = Drive not running at min speed 1 = Drive running at min speed
4	Operating at Maximum Speed	R	0 = Drive not running at max speed 1 = Drive running at max speed
5	Stopped in Auto Restart	R	0 = Stopped in Auto Restart mode not active 1 = Stopped in Auto Restart mode active
6	Alarm Active	R	0 = No alarms currently active 1 = At least one alarm is currently active
7	Warning Active	R	0 = No warnings currently active 1 = At least one warning is currently active
8	Fixed Speed/VFD Control Mode	R/W	Read: 0 = Running in fixed speed mode 1 = Running in VFD control mode Write: (host mode required) 0 = Run in fixed speed mode 1 = Run in VFD control mode
9	NA	-	Read as 0
10	NA	-	Read as 0
11	NA	-	Read as 0
12	Unit Type Bit 0	R	Read as 1 (Nirvana Drive Type)
13	Unit Type Bit 1	R	Read as 0 (Nirvana Drive Type)
14	Unit Type Bit 2	R	Read as 1 (Nirvana Drive Type)
15	Unit Type Bit 2	R	Read as 0 (Nirvana Drive Type)

Table 3: Language Selection Register Details

Register Value	Language
0	English
1	Chinese
2	Spanish
3	Portuguese
4	French
5	Italian
6	German
7	Dutch
8	Danish
9	Norwegian
10	Swedish
11	Finnish
12	Turkish
13	Lithuanian
14	Latvian
15	Estonian
16	Maltese
17	Slovenian
18	Slovakian
19	Czech
20	Hungarian
21	Polish
22	Greek