

## 25 Pin

Signal Pin	Related Pin	Signal Name	Signal Type	Description
1	12, 14	Setpoint Status Return / CEX Locked Return	Return	See pin 14
2	15	Reflected Power Monitor	AO	The signal on this analog output provides a linearly scaled readback of the RF reflected power. The default range is 0 V to 5 V. 0 V to 5 V correlates to 0 W to 1000W.
3	16	RF Power Monitor	AO	The signal on this analog output provides a linearly scaled readback of the RF power. The source of the signal depends on the power control mode. In forward power control mode it provides the forward power, in load power control mode the load power. The default range is 0 V to 5 V. 0 V to 5 V correlates to 0 W to 1000W.
4	17	RF Power On	DI	The signal on this digital input enables or disables RF output power. A transition from <i>low</i> to <i>high</i> state will enable RF output power; a transition from <i>high</i> to <i>low</i> state will disable RF output power.
5	18	RF Power / Process Control Setpoint	AI	The signal provided to this analog input represents a linearly scaled setting for the RF power setpoint. The function of the signal provided to this analog input depends on the power control mode. In forward power control mode it sets the requested forward power; in load power control mode the requested load power. The default voltage range for this analog input is 0 V to 5 V. 0 V to 5 V correlates to 0 W to 1000W.
6	19	Process Control	DI	The signal on this digital selects forward power or process control regulation mode. A transition from <i>low</i> to <i>high</i> state will enable process control regulation mode, a transition from <i>high</i> to <i>low</i> state will enable forward power regulation mode. (See also pin 10.)
7	20	Process Control Feedback	AI	The signal provided to this analog input is used as process control feedback input, where the process control setpoint is given by pin 5. The scaling for Process Control Setpoint (pin 5) and Process Control Feedback (pin 7) must be identical. This signal closes the control loop around external components in the RF path. Typically, matching networks provide a scaled DC bias or RF peak voltage monitor signal which is applied to this pin. When set to process control mode, the generator compares the value

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				for process control setpoint with process control feedback and adjusts the RF output power to maintain both values at the same level. To enable this function, the process feedback source must be set to analog (see user manual for more details).
8	21	Load Power Control	DI	The signal on this digital input selects forward power or load power regulation mode. A transition from <i>low</i> to <i>high</i> state will enable load power regulation mode. A transition from <i>high</i> to <i>low</i> state will enable forward power regulation mode. (See also pin 29.)
9	22	Over temperature Error Return	Return	See pin 22
10	23	Interlock	DI	To satisfy the interlock, an external loop with a resistance of less than 15 ohms must be closed between pin 10 and pin 23. Pin 23 supplies this loop through a current limiting circuit (maximum 120 mA). Also a voltage between 5 V and 24 V referenced to ground (pin 19 or 21) can be applied to pin 10 to close the interlock.
11	24	Interlock Satisfied Return	Return	See pin 24
12	1	CEX Locked	DO	When the generator has recognized a valid CEX signal on the CEX input and has locked on it, a low impedance is created between this pin and pin 1.
13	Shield of 25-pin D-Sub connector	12 V DC Supply Voltage	Supply	Supply voltage of 12 V (maximum current 100 mA).
14	1	Setpoint Warning	DO	When the generator is out of setpoint, a low impedance is created between this pin and pin 1.
15	2	Reflected Power Monitor Return	Return	See pin 2
16	3	RF Power Monitor Return	Return	See pin 3
17	4	RF Power On Return	Return	See pin 4
18	5	RF Power / Process Control Setpoint Return	Return	See pin 5
19	N/A	GND	GND	DC ground connection common to chassis ground.
20	7	Process Control Feedback Return	Return	See pin 7
21	N/A	GND	GND	DC ground connection common to chassis ground.
22	9	Over temperature Error	DO	When the generator detects an over temperature condition and issues an error, a low impedance is created between this pin and pin 9.
23	10	Interlock	Supply	Supply for the interlock string ending at pin 10.

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24	11	Interlock Satisfied	DO	When the interlock is satisfied, a low impedance is created between this pin and pin 11.
25	19	Blanking / Pulsing	Pulse Input	An external square wave signal can be applied to this digital input to externally pulse the RF output power.