ATD-20 - Automatic Telephone Dialer



The ATD-20 is the remote alarm notification system of the Powerbase Platform. It monitors system functions and notifies the user of any alarm or trip conditions.

The ATD answers all incoming calls after 1 ring. The caller presses the # symbol to activate the phone in the power station. The call pickup function determines if a voice or data line is calling. Voice calls activate the ATD voice menu system. The caller is able to check the status of the turbine, generator, RTDs and water levels.

Data line calls (from a remote computer/modem) causes the ATD to transfer calls to the station SCADA computer.

The ATD has four channels of pre-defined inputs that monitor the building environmental condition list. Four additional channels are available for custom configuration.

When an alarm/trip is activated, the ATD-20 calls up to 9 pre-programmed telephone/pager numbers and leaves the appropriate trip condition message.

ATD Features

- •operator can dial unit to monitor the status as well as retrieve information on operating modes, reclose states and headpond levels
- •once the alarm is set, the ATD calls up to 9 preset telephone/pager number and the alarm is acknowledged through the telephone system
- •unit serves as a pass through for the regular phone system and switches over to SCADA modem when the modem is installed, requiring only one phone line
- •dry contact inputs for fire, intrusion, flooding and high/low building temperature
- •4 user defined alarm inputs provided
- •all data parameters are available, including RTD readings, waterlevels, turbine status, etc

ATD-20 Technical Specifications

Input/Output	
telecom interface	*accepts single line telecom central office tip and ring
	•accepts land line or radio link phone systems
	•provides traffic control between local power station voice phone and Powerbase Modules and local SCADA/modem

System Function

•provides voice message notification of specific system faults from Powerbase Modules connected to Optocom (RS-485) bus

- •4 pre defined alarm inputs channels for:
- power station building intrusion
- power station building temperature
- •power station building flood detection
- •power station building fire/smoke alarm
- •4 user defined alarm input channels
- alarm trips are assigned a telephone number (maximum 9) to call the appropriate authorities at a cell phone number or voice/numeric pager

Isolation/Communications

- •high voltage, optically coupled proprietary Optocom (RS-485) communication interface between Powerbase Modules
- •1500 VAC high potential test isolation between bus and module
- •all logic circuits are ground potential

General	
power supply voltage	•world universal;100 to 240 VAC, 50/60 Hz or 110 VDC to 340 VDC
power supply current	•power supply current 0.4A, AC or DC
operating storage temperature	• -10°C to 50°C, ambient air
storage temperature	• -20°C to 75°C
humidity	•0 to 95%, non-condensing, conformally coated circuits.
EMC/transient protection	•meets European EMC Directive 1997, including radiated, conducted and immunity to EMC and electrical fast transients (IEC 801 and CISPR 11 and 14)
shipping weight	•less than 5kgs