

# ONGUARD®

## 800 SYSTEM

### MODULAR SPECIAL HAZARD SAFETY CONTROLS

The Allestec model 1457 NT420 Gas Module monitors industry standard 4-20 mA output signals, allowing a real time digital display of the input current. The NT420 is connected through the 800 panel motherboard buss and is able to beckon the Alarm, Fault and the Relay Modules. This module is capable of being utilized as a standalone module, or can be integrated with other Allestec modules.

Programming is completed through the two front panel membrane switches. A sonalert responds to each command as the parameters are entered. While in the program mode, all relay outputs are disabled and the fault circuit is active. For each alarm level, the respective relay output will energize and follow its latching mode as established in the program setup. The program mode is also capable of displaying the actual 4-20mA loop current in real time. This feature can be utilized for loop current diagnostics for system servicing.

An optional 4-20mA output is available for a recorder or similar type of measuring instrument. This output signal is an exact duplicate of the input signal and has no influence on the module calibration.



### FEATURES

- Fully programmable from front panel
- No potentiometers to adjust
- Prevent sensor drift of display utilizing a dead band area
- Three levels of alarm set points with relating relays
- All user adjustments executed with two membrane switches
- Real time digital display from 0 to 100 %LFL, PPM, or % input current
- Real time digital display of 4-20mA current
- Optional 4-20mA recorder output
- Under range, over range, over current, fault annunciation
- 24VDC open collector fault output, failsafe mode
- Ability to beckon Allestec Alarm, Fault and Relay Module
- DESIGN FEATURES
  - True analog to digital conversion
  - True digital display representation of loop current
  - Linear scale
  - Integral microprocessor design
  - Digital filter
  - Display digit fluctuating inhibitor
  - Memory retention with loss of power
  - 100 milliseconds loop current sampling rate
  - Peak hold of 4-20mA signal prevents display dither

REPRESENTED BY:



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# GAS module

CE

# SPECIFICATIONS

## ELECTRICAL

Approved operating voltage:	20 - 28 VDC power source
Operating current:	Quiescent with input = 4mA: 85mA Maximum alarm with input = 20mA: 130mA
Dry relay outputs:	5 amps, 30 VDC resistive, 250 VAC Output relay sealed and contains an inert gas Relays are selective for N.O. or N.C.
Sensor / transmitter output 24 VDC power:	Fused for 3 amps

## DISPLAY

Red seven segment displays:	Low scale displays "ur" for under range, then -10 to 00 High scale displays 1H for 100, the "or" for over range and "oc" for over current
Dominant wavelength:	640nm
Segment height:	.3" high
Display LEDs:	Red - HIHI indicates high high alarm Red - HI indicates high alarm Orange - LO indicates low alarm Yellow - FAULT indicates fault condition

## MECHANICAL

Size:	1.04"W X 3.46"H X 6.4"D
Weight:	4.2 ounces

## ENVIRONMENT

Ambient operating temperature:	0 degrees F to 150 degrees F, -17 degrees C to 65 degrees C, 90% humidity non-condensing
Packaging and exposure:	NEMA 1

## PART NUMBER

## DESCRIPTION

800-1457-1454	NT420 Gas detection module %LFL
800-1457-1489	NT420 Gas detection module PPM
800-1457-1490	NT420 Analog input module %
800-1186	System manual

