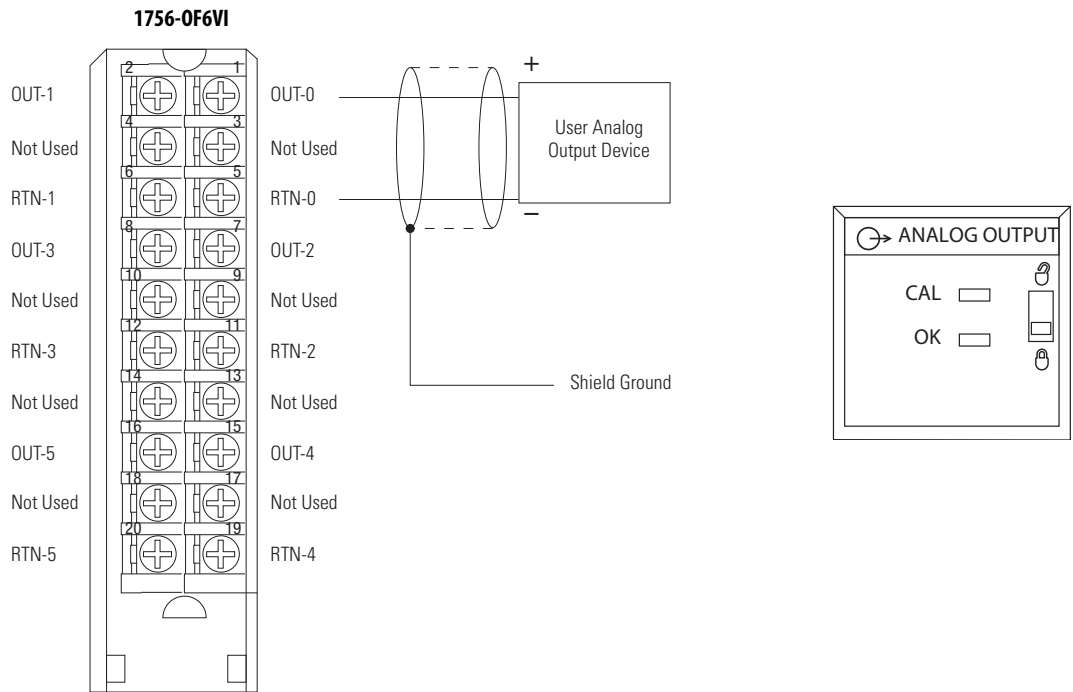


### 1756-OF6VI

#### ControlLogix voltage loop output analog module



Place additional devices anywhere in the loop.

#### Signal and User Counts - 1756-OF6VI

Range	Low Signal and User Counts	High Signal and User Counts
±10V	-10.517V -32768 counts	10.517V 32767 counts

#### Technical Specifications - 1756-OF6VI

Attribute	1756-OF6VI
Outputs	6 individually isolated
Output range	± 10.5V
Resolution	14 bits across 21V (1.3 mV) (13 bits across 10.5V +sign bit)
Current draw @ 5.1V	250 mA
Current draw @ 24V	175 mA
Total backplane power	5.5 W
Power dissipation, max	4.85 W
Thermal dissipation	16.54 BTU/hr
Output impedance	<1 Ω
Open circuit detection	None
Overvoltage protection	24V DC
Short circuit protection	Electronically current limited
Drive capability	> 1000 Ω loads, 10 mA

**Technical Specifications - 1756-OF6VI (continued)**

Attribute	1756-OF6VI
Settling time	< 2 ms to 95% of final value with resistive loads
Calibrated accuracy @ 25 °C (77 °F)	Better than 0.1% of range
Calibration interval	6 months typical
Offset drift	60 $\mu$ V/°C typical
Gain drift with temperature, nom	50 ppm/°C
Gain drift with temperature, max	80 ppm/°C
Module error	0.5% of range
Module scan time, max	25 ms floating point 10 ms integer
Data format	Integer mode (left justified, 2 s complement) IEEE 32-bit floating point
Module conversion method	R-Ladder DAC, monotonicity with no missing codes
Isolation voltage	250V (continuous), basic insulation type, output channels-to-backplane, and output channel-to-channel Routine tested at 1350V AC for 2 s
Module keying	Electronic, software configurable
Removable terminal block	1756-TBNH 1756-TBSH
RTB keying	User-defined mechanical
Slot width	1
Wire category	2 <sup>(1)</sup>
North American temperature code	T4A
IEC temperature code	T4
Enclosure	None (open-style)

(1) Use this conductor category information for planning conductor routing as described in the system-level installation manual. See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

**Environmental Specifications - 1756-OF6VI**

Attribute	1756-OF6VI
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	0...60 °C (32...140 °F)
Temperature, surrounding air, max	60 °C (140 °F)
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	50 g
Emissions	CISPR 11, Class A

**Environmental Specifications - 1756-0F6VI (continued)**

Attribute	1756-0F6VI
ESD immunity IEC 61000-4-2	6 kV contact discharges 8 kV air discharges
Radiated RF immunity IEC 61000-4-3	10V/m with 1 kHz sine-wave 80% AM from 80 . . . 2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM @ 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000 . . . 2700 MHz
EFT/B immunity IEC 61000-4-4	±2 kV at 5 kHz on shielded signal ports
Surge transient immunity IEC 61000-4-5	±2 kV line-earth (CM) on shielded signal ports
Conducted RF Immunity IEC 61000-4-6	10V rms with 1 kHz sine-wave 80% AM from 150 kHz . . . 80 MHz on shielded signal ports

**Certifications - 1756-0F6VI**

Certification <sup>(1)</sup>	1756-0F6VI
UL	UL Listed Industrial Control Equipment. See UL File E65584.
CSA	CSA Certified Process Control Equipment. See CSA File LR54689C. CSA Certified Process Control Equipment for Class I, Division 2 Group A,B,C,D Hazardous Locations. See CSA File LR69960C.
CE	European Union 2004/108/IEC EMC Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 61326-1; Meas./Control/Lab., Industrial Requirements</li> <li>• EN 61000-6-2; Industrial Immunity</li> <li>• EN 61000-6-4; Industrial Emissions</li> <li>• EN 61131-2; Programmable Controllers (Clause 8, Zone A &amp; B)</li> </ul> European Union 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> <li>• EN 60079-15; Potentially Explosive Atmospheres, Protection "n"</li> <li>• EN 60079-0; General Requirements II 3 G Ex nA IIC T4 X Gc</li> </ul>
FM	FM Approved Equipment for use in Class I Division 2 Group A,B,C,D Hazardous Locations
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3

(1) When marked. See the Product Certification link at <http://www.ab.com> for Declarations of Conformity, Certificates, and other certification details.