

#### GIVI MISURE s.r.l.

Via Assunta 57 - 20054 NOVA MILANESE (MI) ITALY TEL.+39 0362.36.61.26 FAX +39 0362.36.68.76 www.givimisure.it sales@givimisure.it

Code	Project	Release	Title
ST02	A39	$\boldsymbol{A}$	TECHNICAL DATASHEET

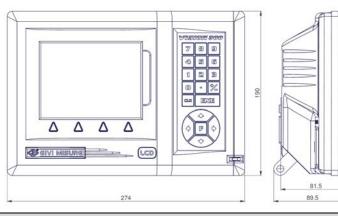
# **DIGITAL READOUT VI900**

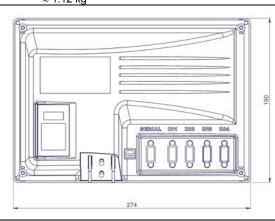
### **GENERAL FEATURES**

- · Compact-designed digital readout.
- 5.7" touch-screen color, back-lit LCD TFT panel which allows up to 4 axes to be displayed.
- USB, Touch Probe, CAN Bus and serial RS-232 interfaces.
- Touch-pen provided.
- Resolutions up to 0.1 μm.
- · Graphic visualization of function execution.
- On-line HELP.
- · Diagnostic of readout and optical scales.
- · Reading of coded references (in combination with NCS scale).
- Universal software for any kind of machine tool, upgradeable through serial port.
- Program store for 1000 blocks.
- Option: flush-mounted version (on a panel).



MECHANICAL AND ELECTRICAL FEATURES		
Available resolutions	1 mm - 500 - 200 - 100 - 50 - 20 - 10 - 5 - 2 - 1 - 0.5 - 0.2 - 0.1 µm 1° - 0.5° - 0.2° - 0.1° - 0.05° - 0.02° - 0.01° - 0.005° - 0.002° - 0.001°	
Power supply	230 Vac ± 10% - 50/60 Hz / 110 Vac ± 10% - 60 Hz / 24 Vac ± 10% - 50/60 Hz	
Current consumption	60 mA <sub>MAX</sub> (230 Vac) / 120 mA <sub>MAX</sub> (110 Vac) / 500 mA <sub>MAX</sub> (24 Vac)	
Axis display	5.7" color, back-lit LCD TFT	
Signal input per axis	2 square waves, phase displacement 90° ± 5° + synchronized index TTL 05 Vdc	
Maximum input frequency	300 kHz	
Operating temperature	0° ÷ 50°C	
Storage temperature	-20° ÷ 70°C	
Relative humidity	95% (not condensed)	
Vibration resistance (EN 60068-2-6)	25 m/s <sup>2</sup> [55 ÷ 2000 Hz]	
Protection class (EN 60529)	keyboard IP 67 rear panel IP 42	
Weight	≈ 1.12 kg	





## **ORDERING CODE**

VI9	3	3	TO	230V	0	01
VI9	2 = 2 axes 3 = 3 axes	2 = 2 axes	IN = ANY TYPE	230V = 230 Vac	0 = standard	10 = 0.1 mm

FT = TRANSV. MILLING MACHINE

MACHINE
AL = BORING MACHINE

24V = 24 Vac

= flush-mounted 100 5

5 = 0.005 mm 1 = 0.001 mm 0.1 = 0.0001 mm

Example COUNTER VI933TO 230V 0 0.1



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## LIST OF FUNCTIONS

E O EVE	DELETING STORED DATA
	CETTING DOINTING LINE COACINGO
F 9 EXE	SETTING PRINTING LINE SPACINGS
<b>F 26</b> EXE	CONSTANT STEP
<b>F 28</b> EXE	AXIS COUPLING
<b>F 30</b> EXE	LINEAR CORRECTION
F 31 FXF	NON-LINEAR CORRECTION
F 32 EVE	SCALE EACTOR
F 34 EVE	DADILIC/DIAMETED CONVEDCION
F 34 EXE	RADIUS/DIAMETER CONVERSION
F 36 EXE	VARIABLE RESOLUTION
<b>F 37</b> EXE	SEXAGESIMAL DEGREE READNG
<b>F 38</b> EXE	ANGULAR READING MODE
<b>F 44</b> EXE	CALCULATING THE TAPER
<b>F 46</b> FXF	AUTOMATIC CALCULATING THE TAPER
F 18 EYE	CALCULATING THREADS
E FO EVE	CALCULATING THE WEIGHT OF MATERIALS
F 50 EXE	CALCULATING THE WEIGHT OF MATERIALS  CALCULATING THE TIP SPEED
F 32 EXE	CALCULATING THE TIP SPEED
<b>F</b> 54 EXE	CALCULATING THE ANGULAR SPEED
<b>F 55</b> EXE	ENABLING THE AUTOMATIC QUOTA TRANSMISSION
<b>F 64</b> EXE	ROUND FLANGE
<b>F 66</b> EXE	DELETING STORED DATA SETTING PRINTING LINE SPACINGS CONSTANT STEP AXIS COUPLING LINEAR CORRECTION NON-LINEAR CORRECTION SCALE FACTOR RADIUS/DIAMETER CONVERSION VARIABLE RESOLUTION SEXAGESIMAL DEGREE READNG ANGULAR READING MODE CALCULATING THE TAPER AUTOMATIC CALCULATING THE TAPER CALCULATING THE WEIGHT OF MATERIALS CALCULATING THE ANGULAR SPEED CALCULATING THE ANGULAR SPEED ENABLING THE AUTOMATIC QUOTA TRANSMISSION ROUND FLANGE SPECIAL ROUND FLANGE INCLINED CONSTANT PITCH ZERO REF. APPROACHING ALERT PROGRAMMING THE MEMORY BLOCKS CIRCUMFERENCE CENTER MIRROR IMAGE SCALE VALUE SET AXIS SPEED DISPLAYING BUZZER ON/OFF DEVICE DIAGNOSTIC RECALLING OF SPECIAL FUNCTIONS (F1-F8) 100 TOOL OFFSETS ON-LINE HELP SETTING THE TYPE OF SPINDLE ROTATION SPEED LANGUAGE SELECTION CALCULATOR
<b>F 68</b> EXE	INCLINED CONSTANT PITCH
<b>F</b> 69 EXE	ZERO REF. APPROACHING ALERT
F 70 FXF	PROGRAMMING THE MEMORY BLOCKS
F 72 EYE	CIRCLIMEERENCE CENTER
F 74 EVE	MIDDOD IMAGE
F 74 EAE	
F /8 EXE	SCALE VALUE SET
F 80 EXE	AXIS SPEED DISPLAYING
<b>F 82</b> EXE	BUZZER ON/OFF
<b>F 89</b> EXE	DEVICE DIAGNOSTIC
F nn Fn	RECALLING OF SPECIAL FUNCTIONS (F1-F8)
ORG	100 ORIGINS OF THE AXES
TOOLS	100 TOOL OFFSETS
HEI P	ON-LINE HELP
E 09719 EVE	SETTING THE TYPE OF SPINDLE ROTATION SPEED
F 98718 EXE F 98762 EXE	LANGUAGE OF FOTION
F 98/62 EXE	LANGUAGE SELECTION
CALC	CALCULATOR
	INVERSION OF COUNTING DIRECTION
	SCALE ZERO REFERENCE (REF)
	SELF-TESTING
	ABSOLUTE/INCREMENTAL COUNTING
	RESETTING/PRE-SETTING A VALUE
	MM/INCH CONVERSION
	MIDDONT ON OUR ATION

MIDPOINT CALCULATION

# **WARNING!!**

### WHAT TO AVOID

- 1. All mechanical reworks (cutting, drilling, face milling a.s.o.).
- All mishandling.
- Impacts and external stress.
- 4. Exposure to external magnetic fields.

