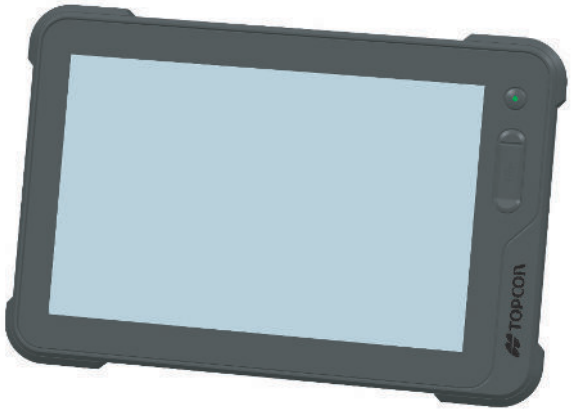
The GX-90 is a compact, rugged display featuring a 10.1-inch full-color LCD multi-touch screen, offering superior visibility and interaction in any environment.

Powered by a robust Linux® system, it delivers grade information and allows for control with exceptional precision. Designed with a strong cast housing and sealed internals, the GX-90 ensures durability and reliability.

Enhanced with a USB-C port for seamless connectivity. The GX-90 is the optimal solution for demanding machine control applications.



Key Features

- **Large Display**: Features a 10.1-inch diagonal sunlight-viewable color LCD, enhancing visibility in various lighting conditions with a responsive, capacitive multi-touch interface. Supports both portrait and landscape orientations for versatile viewing options.
- **Linux Operating System**: Runs on a robust Linux platform, ensuring stable and powerful performance for processing.
- **USB-C Connectivity for Efficient Workflow**: The GX-90 includes a USB-C port, complying with modern connectivity standards for efficient data transfer.
- **Power Connection**: Experience seamless operation with our enhanced power connection, now compatible with switched power sources. The display automatically activates with the machine, eliminating the need for manual intervention.
- **Gorilla® Glass**: Gorilla Glass is known for its exceptional strength, scratch resistance, and durability compared to traditional glass, and offers excellent sunlight visibility.

Specifications

Electrical	
Supply Voltage	9-36 VDC
Supply Current	Typical current: 0.5 A at 24 V Maximum current: 7 A at 9 V
Switched Output Power	100 mA @5 VDC output
Emissions	Applicable regulation: ISO 13766-1:2018
Immunity	Applicable regulation: ISO 13766-1:2018 ESD: ±8 kV Contact Discharge, ±15 kV Air Discharge
Electrical Transients	ISO 7637-2:2011 Pulse 1, 2a, 2b, 3a, 3b and ISO 16750-2:2023 starting profile, load dump

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Physical	
Display	10.1 in LCD display - 1280 x 800 resolution, optically bonded capacitive touchscreen
Housing	Aluminum die cast
Audio	Environmentally sealed speaker with 2 watt amp
Switches	Momentary push button (power, navigation)
Connectors	14 socket Amphenol CMB07C-12-14P connector, gold-plated contacts, conductive anti-corrosive plated housing
Weight	~4.6 lbs (~2.1 kg) with RAM-Mount; ~4.4 lbs (2.0 kg) without RAM-Mount
Environmental	
Operating Temperature	-4 °F to 158 °F (-20 °C to 70 °C)
Storage Temperature	-40 °F to 185 °F (-40 °C to 85 °C)
Moisture Test	240 hours at 96% RH
Shock Test	25 G 11 ms ½ sine wave 3X each direction per axis
Salt Fog Test	48 hours (ASTM B117-03)
Vibration Test	10 Hz to 2000 Hz Random, 5 G_{rms}
Ingress Rating	IP66, IP67
Communications	
Ports	USB 3.1 Gen1 (Type C connector) and Ethernet
RF Radiated Immunity	Applicable regulation: ISO 13766-1:2018
Cable Requirements	
To use the GX-90 as an EMC-compliant component in a system, the connection cable part for Ethernet must be Ethernet-compliant (twisted pair, AWG, etc.) and include a shielding connected to the main connector.	

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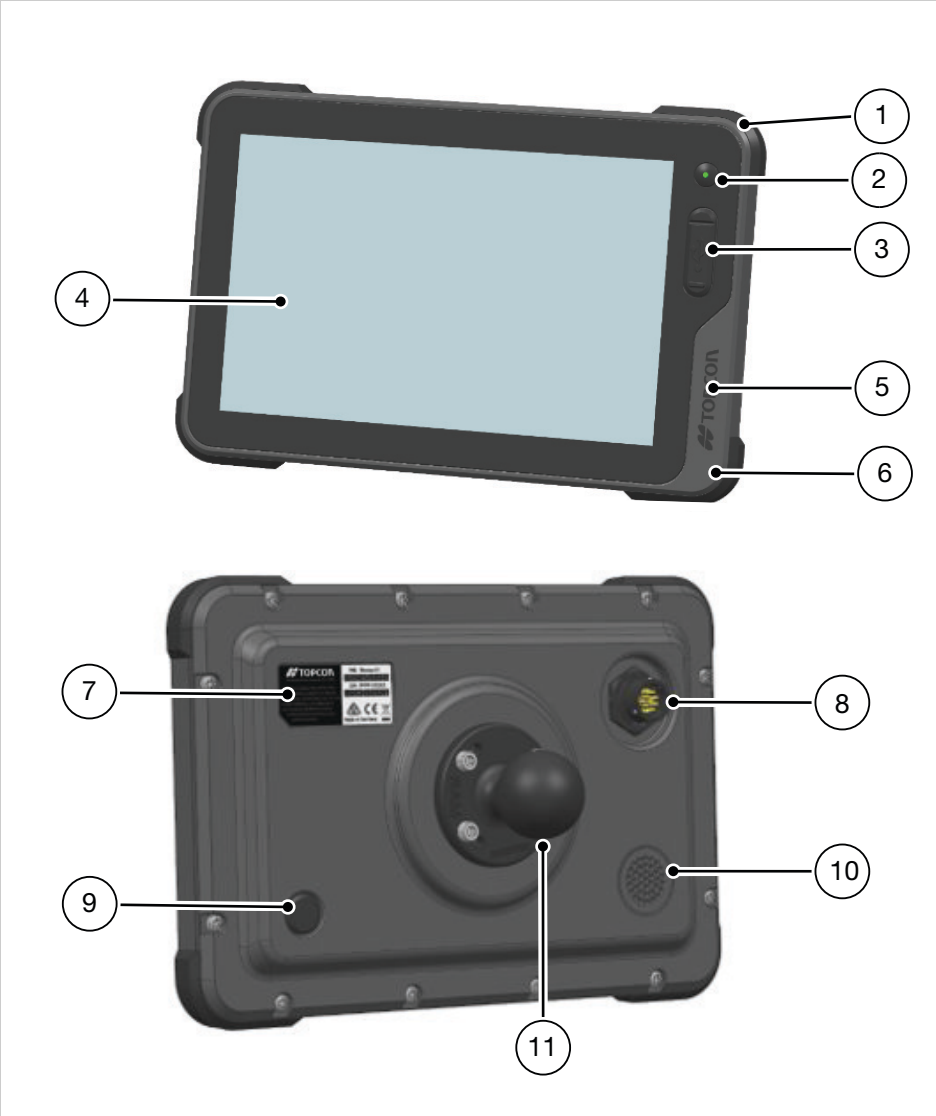
Features



1	Corner Bumper	7	Serial Label Recess
2	ON/OFF Button with Backlit Dot	8	Connector
3	USB C Port with Cover	9	Core Vent
4	LCD Multi-Touch Screen	10	Speaker
5	Printed Topcon Logo gloss black	11	RAM Ball Mount Type C
6	Powder Coat		

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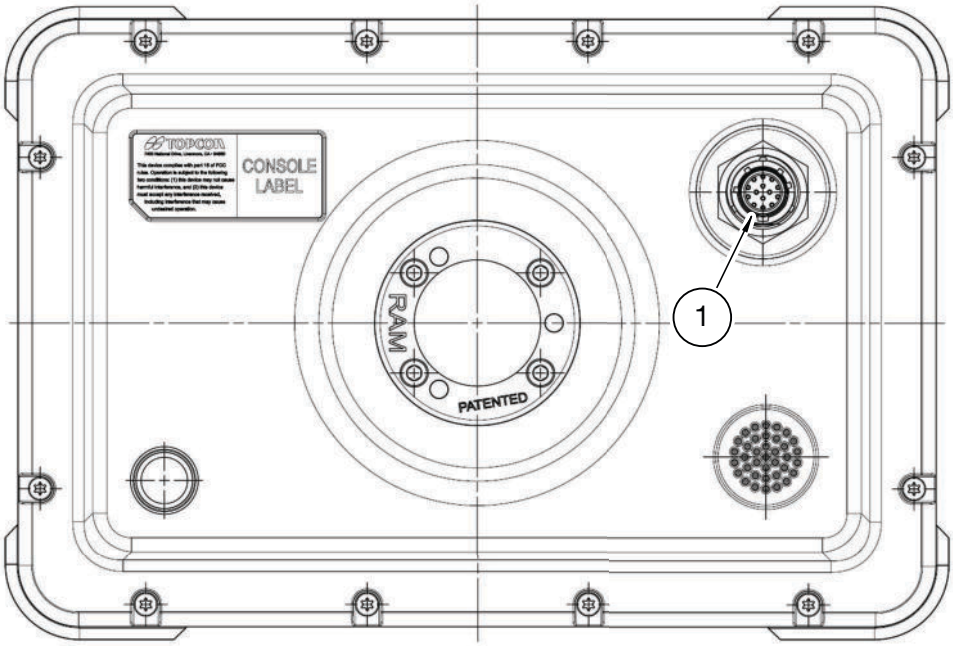
Connector Pinouts



1 Amphenol Connector

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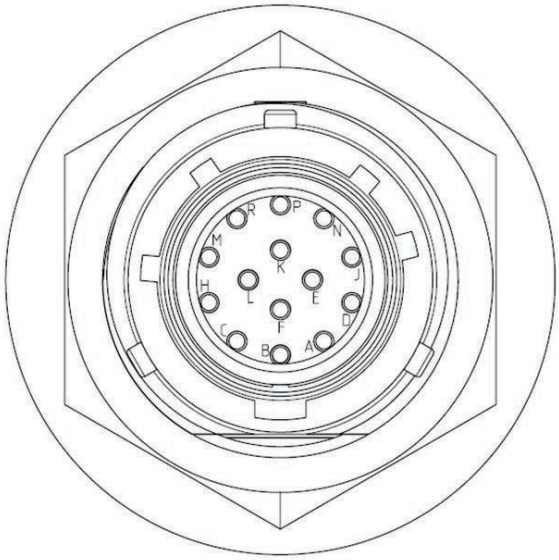
Connector Amphenol CMB07C-12-14P	
A	Battery_In
B	GND
C	Ignition_In
D	Digital Output
E	Not Used
F	Not Used
H	Audio GND
J	Audio Detection
K	Ethernet TX+
L	Audio Out_L
M	Audio Out_R
N	Ethernet RX+
P	Ethernet TX-
R	Ethernet RX-



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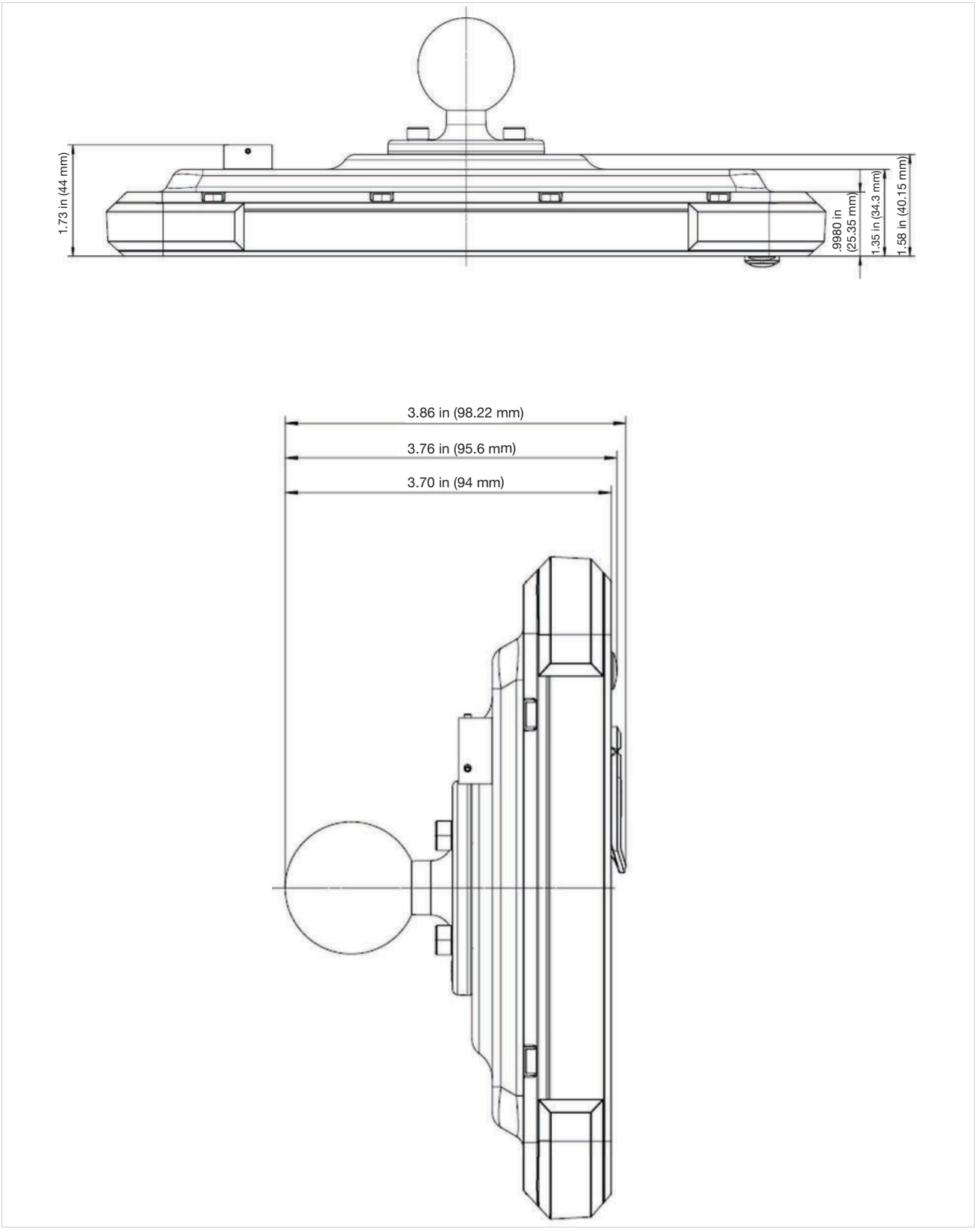
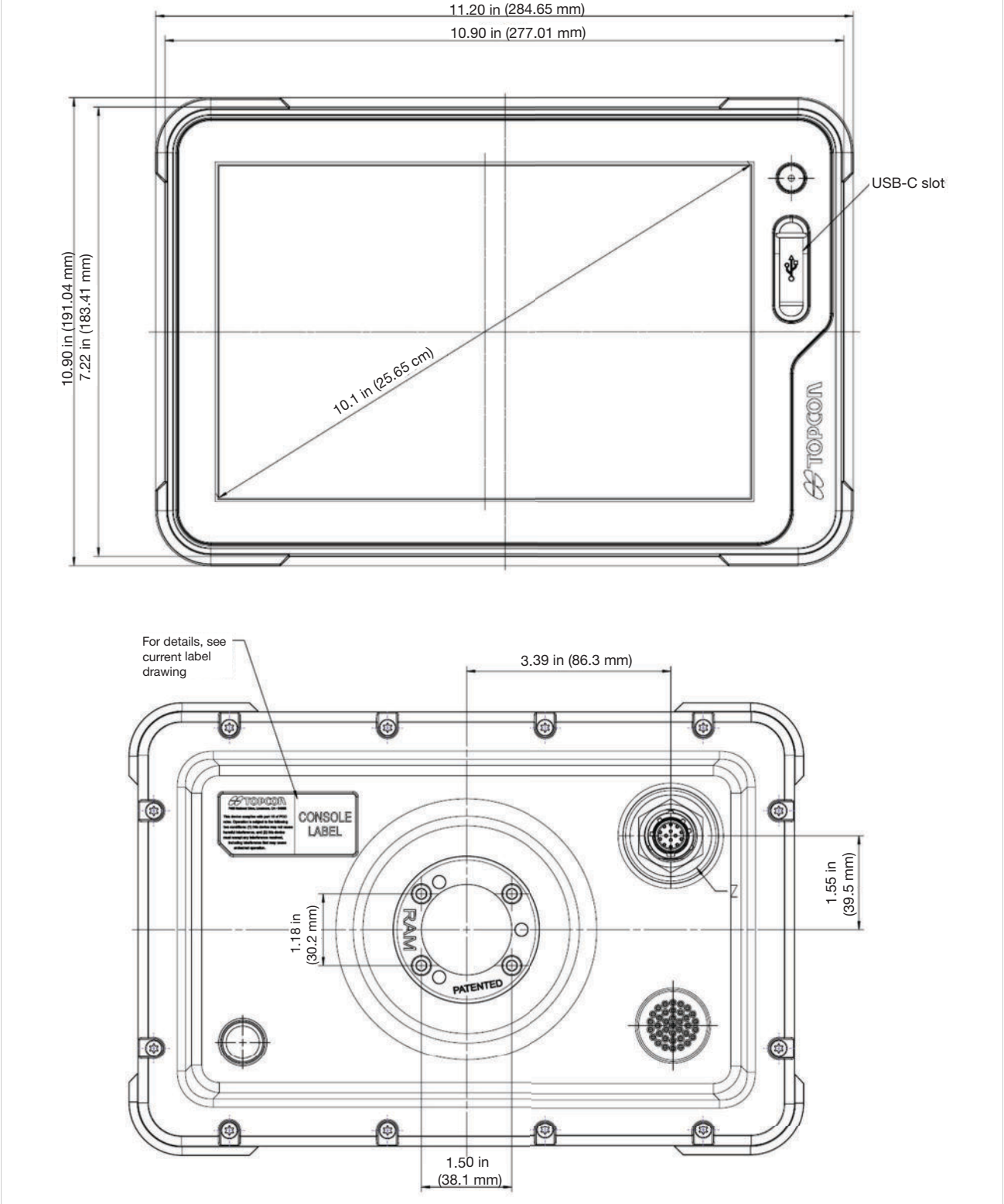
Envelope Dimensions





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