

XD+ Console



12.1” Customizable In-Cab Display

Designed with the future in mind, the Topcon XD+ touchscreen console, including revamped proprietary (Horizon) software and Topcon Agriculture Platform (TAP) integration, allows full-feature customization. Customers can optimize investment by paying only for capabilities they need.

Off-the-shelf unlocked features include Guidelines, Tasks, ISO-UT, and TAP Market. All additional Horizon OS features are easily accessible and unlockable utilizing TAP via the console or personal device.

Coupled with Topcon receivers, steering control, and correction services; the new level of customization provides flexible guidance solutions, priced right. Plus, with the complete Horizon OS feature-set including compatibility with the full-range of Topcon sensors and application control technology, the XD+ is ready for even the most progressive operations.

PHYSICAL

Housing	Aluminum back-housing, plastic front-housing, black with rubber frame
Dimensions (l x w)	8.4 x 13 in. / 214 x 330 mm
Mounting	Landscape or portrait / Standalone / In-dash

DISPLAY

Type	TFT Color Graphic LCD with LED backlight
Size (w x h)	12.1 in. / 261 x 163 mm
Resolution	1280 x 800 px (WVGA), 16:10
Colors	16.7 Million
Brightness	1000 cd/m ²
Contrast ratio	750:1

INPUT DEVICES

Touch	PCT		
Indicators and sensors	- Light sensor	- 1 Multicolor-LED	- 3 Status-LED's

ELECTRONICS

Processor platform	CPU: NXP I.MX6®, quad core, 1GHz RTC: Buffered by gold cap	Mass storage: 8GB RAM: 1GB	
Speaker	80 dB @ 1kHz in 1 m distance		
Power supply	Operating voltage range: 9 – 36 V DC Protection: Short circuit protection Overvoltage resistance: 48 V for max. 5 minutes Inverse polarity protection: Up to -48 V DC for max. 5 minutes		
Current consumption (without external load), max.	Power mode	Current at 13.5 VDC	Current at 27 V
	On	≤ 1.8 A	≤ 0.7 A
	Low-power	Depending on config	
	Sleep	≤ 0.2 A	≤ 0.1 A
	Off	≤ 2 mA	≤ 4 mA

INTERFACES

CAN Bus	2 x CAN-Interfaces ISO 11898, CAN-specification, 2.0 B active Up to 1MB (250KB, 500KB, 750KB and 1MB)	
RS-232	1 x RS232-Interface Type: EIA232 (only Rx/D, Tx/D, GND) Speed: Max. 115 Kbps	
USB	Main connector: 1 x High speed	
Inputs	4 configurable analog/digital inputs Input impedance: > 3k Ohm Resolution: 12 bit (1024 digits, 1 digit ~ 3 mV) Input range: 0-12 V or 4-20 mA, or 0-20 mA Max. protectable input voltage: 36 VDC Protection: Short circuit protection Frequency: Max. signal frequency 50 Hz	
Outputs	3 digital outputs Short circuit protection: Up to 36 V I _{max} 300 mA open drain at 12 V	RDS on < 1 Ohm RDS off > 100 kOhm
Video-Interface	Inputs: 3 x analog (2 live streams) Camera supply: 12 VDC Output: 1 x camera control output (open drain) for special functionality (mirror, shutter, heating etc.)	V _{ss} : 1 V Max. current: 500 mA Ampacity 300 mA
Ethernet-Interface	1 x 10/100MB Base	
Audio	1 x Audio output (left, right, GND) Output power: approx. 65 mW @ 32 Ohm	

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CONNECTORS	
Main	Tyco-AMP 3-1437290-7
Video	M12 round connector, female, 5-pole, B-coded acc. to EN 61076-2-101
Ethernet	M12 round connector, female, 4-pole, D-coded acc. to EN 61076-2-101
SOFTWARE	
Operating System	Linux Kernel
Application Programming	– OPUS Projector – ISO-UT
TESTING AND VERIFICATION	
CE-Compliance	EU Directive 2014/30/EU (EMC) according to <ul style="list-style-type: none"> • EN ISO 13766-1: Earth-moving and building construction machinery <ul style="list-style-type: none"> – Electromagnetic compatibility (EMC) of machines with internal electrical power supply • EN ISO 14982: Agricultural and forestry machinery <ul style="list-style-type: none"> – Electromagnetic compatibility – Test methods and acceptance criteria
E1 – Type approval	EU Directive ECE R 10
Protection Level (IP Code)	IP65 and IP66 according to ISO 20653: Road Vehicles <ul style="list-style-type: none"> – Degrees of protection (IP-Code) – Protection of electrical equipment against foreign objects, water and access
Electrical	12 and 24 V – Systems according to: <ul style="list-style-type: none"> • ISO 16750-2: Road Vehicles – Environmental conditions and testing for electrical and electronic equipment <ul style="list-style-type: none"> – Electrical loads • ISO 15003: Agricultural Engineering <ul style="list-style-type: none"> – Electrical and electronic equipment – Testing resistance to environmental conditions
Mechanical	<ul style="list-style-type: none"> • ISO 16750-3: Road Vehicles – Environmental conditions and testing for electrical and electronic equipment <ul style="list-style-type: none"> – Mechanical loads, Code L • ISO 15003: Agricultural Engineering <ul style="list-style-type: none"> – Electrical and electronic equipment – Testing resistance to environmental conditions • Mechanical Shock: Level 2 • Random Vibration: Level 2 • Sinusoidal Vibration: Level 2
Climate	<ul style="list-style-type: none"> • ISO 16750-4: Road Vehicles – Environmental conditions and testing for electrical and electronic equipment <ul style="list-style-type: none"> – Climatic Loads • Operating Temperature Range: -30°C to 65°C • Storage Temperature Range: -40°C to 85°C • ISO 15003: Agricultural Engineering <ul style="list-style-type: none"> – Electrical and electronic equipment – Testing resistance to environmental conditions

Complementary Products



Rooftop Receivers

AGM-1 manual guidance
AGI-4 receiver/steering controller



Steering Control

Retrofit steering solutions (AES-35
and Danfoss EHi Steering Valve)



Correction Services

Full range through base stations
(HiPer VR and MR-2) and reference
station networks (TopNET)



Cloud Connectivity Devices

CL-10 and CI-55 for automatic
data upload to TAP



Tilling, Seeding, Crop Care Control

Leading tilling, seeding, planting,
spraying, and spreading control



Crop Health Monitoring

Nutrient sensor for optimized
and on-the-go application