

WHAT LEVEL OF PRECISION DO YOU NEED?

New Holland PLM™ guidance solutions are compatible with a full range of guidance correction signals that enable you to choose the exact level of precision that your operation requires. GPS and GLONASS are satellite navigation systems that are owned and operated by the US and Russian governments. GNSS (Global Navigation Satellite System) is a term used to encompass all satellite constellation systems, but today GPS and GLONASS are the only systems included.

Both GPS and GLONASS are available to users worldwide. When using a GNSS guidance receiver to track both GPS and GLONASS signals together, the number of satellites the receiver can view is greatly increased. This means you will be less likely to lose satellite coverage, improving reliability, uptime and productivity. Neither GPS or GLONASS alone are able to provide the accuracy required for agricultural use and both require corrections to improve their accuracy. A wide range of correction services are available that offer a variety of accuracy levels, and PLM™ guidance systems give you the compatibility to choose which accuracy best fits your needs.

RTK SUB INCH ACCURACY

RTK (Real-Time Kinematic) is the highest accuracy correction source. It uses either radio or cellular communications to transmit corrections. When using RTK with radio communications, you need access to a base station located within a eight-mile radius of your farm. An RTK base station sends corrections via radio transmission to the GPS receiver attached to your machine. Base stations can be purchased for individual farming use, or if a RTK service network is available in your area, you can access through a subscription service.

RTK corrections can also be received through cellular communication using a modem. This is typically done using either a CORS (Continuously Operating Reference Stations) network or a VRS™ (Virtual Reference Stations) network. CORS and VRS™ networks are integrated system of multiple GPS/GNSS reference stations spread out over a large area, typically 30–45 miles apart, and use a central server to communicate RTK corrections to the cellular modem in your machine. Access to CORS or VRS networks depends on if a network is established in your area, and usually requires a subscription.

NEW xFILL™ TECHNOLOGY

xFill™ is a new feature that enhances the New Holland PLM RTK solution's reliability and in-field run time. During RTK signal interruptions, xFill keeps RTK in a fixed mode with a high level of accuracy.



CENTERPOINT™ RTX OFFERS +/- 1.5 INCH ACCURACY

CenterPoint™ RTX provides the most accurate satellite-based correction service available. It provides repeatable 1.5" accuracy without the use of a traditional base station. CenterPoint is ideal for row crop applications and farms outside RTK network coverage areas.



CenterPoint™ RTX

OMNISTAR G2, XP AND HP OFFER 2 – 4 INCH ACCURACY

OmniSTAR corrections provide mid-range accuracies that are ideal for mowing, planting and spraying. OmniSTAR is a subscription based service that provides the following 3 options.

- OmniSTAR HP provides 2” – 4” pass to pass accuracy
- OmniSTAR XP provides 3” – 4” pass to pass accuracy
- OmniSTAR G2 provides 3” – 4” pass to pass accuracy plus supports



OmniSTAR G2, XP and HP

RANGEPOINT™ RTX OFFERS +/- 6 INCH ACCURACY

RangePoint RTX is a new low-cost correction signal that provides 6” pass-to-pass accuracy and is GPS and GLONASS enabled, providing the additional reliability not offered by other entry level correction sources. RangePoint is ideal for broadacre applications.



RangePoint™ RTX

WAAS OFFERS PASS TO PASS ACCURACY OF 6 - 8 INCH

WAAS is a free correction source sponsored by the U.S. Government's Federal Aviation Administration. It provides 6” – 8” pass to pass accuracy, but can only correct GPS signals. WAAS is best suited for broad acre applications, such as spraying or tillage.



WAAS

	RTK RTK CORS +/- 1”	CenterPoint™ RTX +/- 1.5”	OmniSTAR G2/XP/HP 2” - 4”	RangePoint™ RTX +/- 6”	WAAS 6” - 8”
PRECISION					
APPLICATION					
Spraying	•	•	•	•	•
Spreading	•	•	•	•	•
Tillage	•	•	•	•	•
Mapping	•	•	•	•	•
Mowing	•	•	•	•	•
Harvesting	•	•	•		
Seeding	•	•	•		
Hoeing	•				
Bed Forming	•				
Precision Planting	•				
Strip Till	•				

- Recommended

Correction Services

New Holland offers a number of corrections with three types of delivery so you can choose what is best for your operation.

Correction Accuracy and Initialization

Correction Options	Delivery Method	Accuracy						Initialization/Convergence			
		<1"	1.5"	+/-2"	2-4"	3-4"	6"	<1 min	<5 min	<30 min	<45 min
PLM RTK+		█						█			
PLM 2		█	█					█	█		
PLM 1		█	█	█	█	█	█	█	█		
CenterPoint™ RTK		█						█			
CenterPoint™ RTX™		█	█					█*	█**	█	
OmniStar® HP		█	█	█	█			█	█	█	
OmniStar® XP		█	█	█	█			█	█	█	
OmniStar® G2		█	█	█	█			█	█	█	
RangePoint RTX		█	█	█	█			█	█	█	
WAAS		█	█	█	█	█		█			

* CenterPoint RTX FAST initialization/convergence <5 min ** CenterPoint RTX STANDARD initialization/convergence <30 min

Delivery Method Applications

Delivery Method	Requires
	Open views of the sky at all times
	Reliable cellular coverage is available
	Established RTK base station within 8 miles

Pass to Pass

Field Operations	<1"	+/- 1.5"	+/- 2-4"	+/- 6"
Spraying	█			
Spreading	█			
Field Preparation	█			
Mapping	█			
Harvesting	█			
Seeding	█	█		
Planting	█	█		
StripTill	█			
Water Management	█			

