

# Global Xpress® Ka-band 5W BUC

MODEL No. **NJT5830**

The Unit (5W Ka-band SSPA with Upconverter, a weatherized housing for outdoor use) upconverts L-band IF signal to Ka-band RF signal (29.0 to 30.0 GHz) and covers linearity at 5W (+37 dBm) output and phase noise for potential 16-APSK support with operation temperature of up to 73 °C.

## < Features >

- \* **Capability of supporting 5W minimum output power at 8PSK modulated carrier**
- \* **Filter switch matrix equipped to suppress spurious in order to comply with ETSI requirements**
- \* **Reliable All-weather Performance**



## < Line-up >

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power	M&C	Power Supply
<b>NJT5830</b>	<b>29.000 to 30.000 GHz</b>	<b>28.050 GHz</b>	<b>950 to 1,950 MHz</b>	<b>5 W Linear (+37 dBm)</b>	<b>RS-422 M&amp;C Equipped</b>	<b>+18 to +51 V DC Power</b>

## < Specifications >

Item	Specifications
Output Interface	Waveguide, WR28 with O-ring Groove
Input Interface	[IF / Ref.] Coaxial Connector, N-type female connector (50 ohm)
	[Power / M&C] PT02E-14-12P (12 pin Circular connector)
Maximum Operational Power (MOP)	+37.0 dBm min. [QPSK or 8PSK with 1Msps, $\alpha=0.2$ ] +36.0 dBm min. [BPSK with 1Msps, $\alpha=0.2$ ]
ACPR	-20 dBc max. @ MOP
Conversion Linear Gain	58 dB min., 66 dB max.
Requirement for External Reference	[Frequency] 50 MHz (sine-wave)
	[Input Power] -7 to +5 dBm @ Input port
	[Phase Noise] -105 dBc/Hz max. @ 100 Hz, -130 dBc/Hz max. @ 1 kHz,
Integrated Phase Jitter (DSB)	1.5 degree RMS (1kHz – 1MHz)
IF Input VSWR	2 : 1 max.
RF Output VSWR	2 : 1 max.
Power Requirement	+18 to +51 V DC Power
Power Consumption	88 W max. including BUC Fans
Temperature	Operational Temperature: -40 to +73 °C
	Storage Temperature: -40 to +85 °C
Waterproofing (IP code)	IP65
Dimension & Housing	180 (L) x 100 mm (W) x 50 mm (H) [7.09" (L) x 39.4" (W) x 1.97" (H)] excluding connectors and mounting ears
Weight	1.6 kg [3.5 lbs]
MTBF	100,000 hours min. at +40 °C with fans.

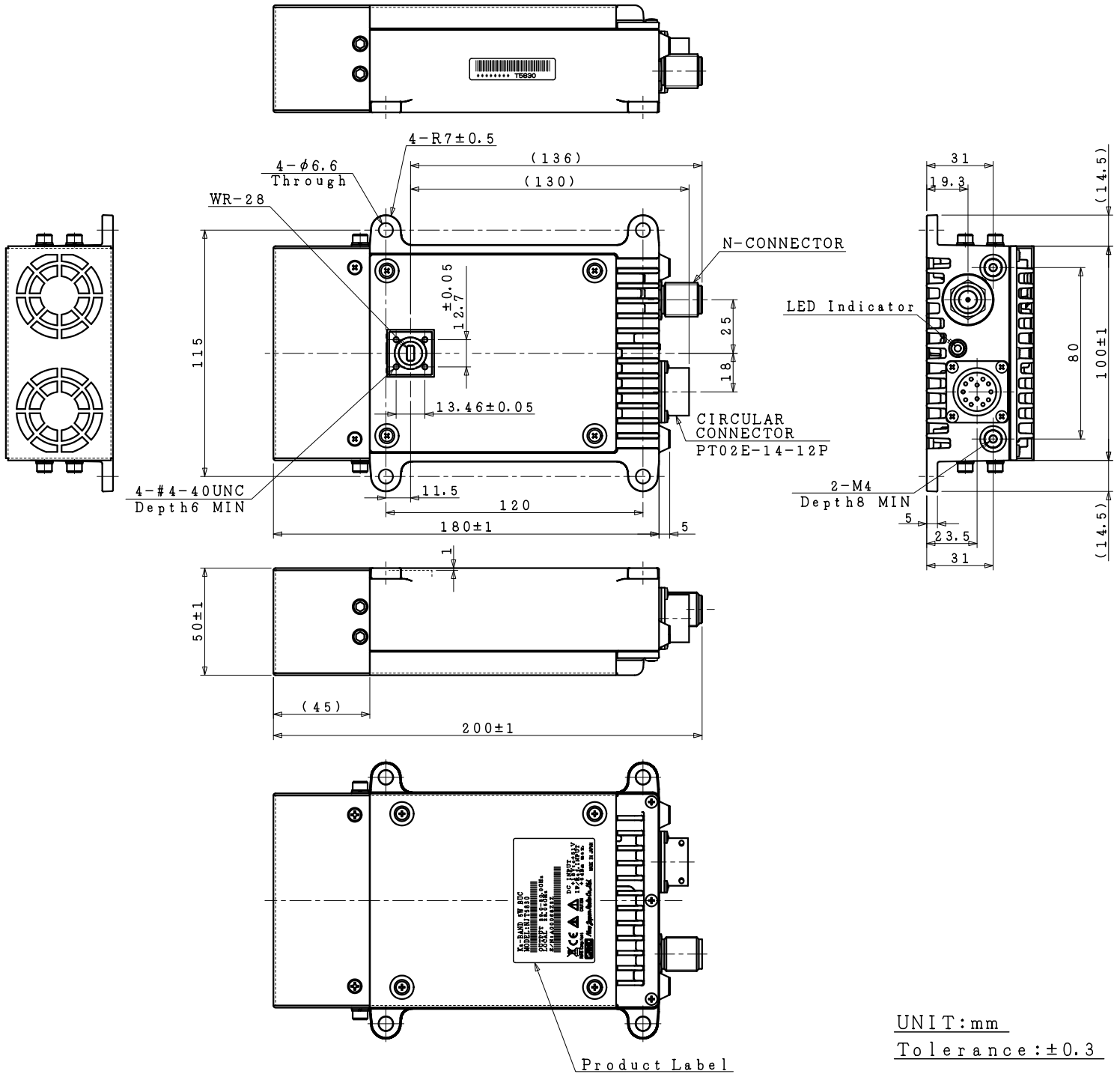
\*Note: The contents of this sheet are subject to change without notice.

Rev.03 GX Ka 5W BUC\_NJT5830

# Global Xpress<sup>®</sup> Ka-band 5W BUC

## MODEL No. NJT5830

### < Outline Drawing >



UNIT: mm  
Tolerance: ±0.3

\*Note: The contents of this sheet are subject to change without notice.

Rev.03 GX Ka 5W BUC\_NJT5830